A CONSOLIDATION OF BUEL'S CULTIVATOR AND THE GENESEE FARMER.

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THE CULTIVATOR.

"TO IMPROVE THE SOIL AND THE MIND."

MONTHLY NOTICES.

COMMUNICATIONS have come to hand since our last, from A. B. N., of Nashua, G****, A. F., Solon Robinson, R. Rubblee, Alonzo Sessions, Will. H. Wills, J. T. Leigh, D. H. Wright, C. Butler, John W. Smith, T. D. C., Peregrinator, John Delano, A. J. Downing, E. D. Worbasse, A Farmer, Geo. Bommer, T. M. Niven, A Practical Farmer, M. E. Merwin, B. A. R., Yankee Farmer, P., J. King, G. Kouwenhoven.

☞ Our absence at Rochester, for ten days past, has prevented attention to several private letters, and answers to many inquiries. They shall be attended to next month.

☞ The articles alluded to in the private note of *A Practical Farmer*, will be very acceptable, as is every thing from the same source.

☞ We should have been glad to have given place to Mr. Bommer's communication this month, had it been possible. It was not received till after our return from the Fair, when our paper was more than filled. It shall be given in our next.

☞ Mr. *S. Williams* will find in the nos. of the current vol. of the Cultivator sent him, the information he asks in relation to pressing the juice from cornstalks.

J. M. H.—The engravings would cost from $10 to $12.

☞ *Lansingville, S. A. Steele, Wm. Dicken*, and several others, should each have paid the postage of their letters. We are ever ready to answer inquiries or attend to commissions for our friends, when in our power, but we do not like to pay $18¾ or 25 cents for the privilege.

☞ The *Pictorial Times* and *Illustrated London News*, containing descriptions of the Fair of the Royal Ag. Society at Derby, were sent from this office to several of our exchange papers, and we suspect the South. Planter and the S. W. Farmer, are indebted to us for the papers they have acknowledged from another source. Certain it is, we sent them copies of the papers mentioned.

SHEDDING OF HORNS IN CATTLE.—By the remark respecting cattle shedding their horns at the age of two or three years, in the Aug. no. of the Cultivator, and which is referred to by "A Saratoga Farmer," it is not intended to convey the idea that the horn falls off as in the case of the deer, but that it is loosened from its base so as to allow a lengthening of the bone of the horn, as without this process growth would be difficult, if not impossible. It is to this annual starting of the horny covering of the bone of the horn, that the annular rings are owing, by which the age of the animal is computed, allowing two or three years previous to the first ring.

OLD ONONDAGA FOREVER!—Our obliging host of the far-famed Syracuse House, is about to become as celebrated for his success in farming, as for his superb accommodations for the traveler. His unrivaled ox, and his splendid porkers, have elicited the admiration of thousands, and when we learned that his wheat crop this year was 48 bushels per acre, we began to think he had distanced competition in this respect also; but it seems that Mr. Dickinson, of "Sunny" (or Onondaga,) "Hollow," has carried off the palm, by producing from an acre, 52 bushels, 8 qts. of wheat. Verily this does not look like a material falling off in the wheat crop. We wait to see what county beats Old Onondaga.

ACKNOWLEDGMENTS.—We tender our kindest thanks to the several friends to whom we are indebted for the various articles alluded to in our "Acknowledgments," from month to month. Since our last, we have received

"*The Horse, by Wm. Youatt.*" American edition, edited by J. S. SKINNER, Esq. From Lea & Blanchard, publishers, Philadelphia.

The American Agriculturist's Almanac, by A. B. ALLEN, from J. Winchester, New-York. It is got up in good taste, and is well worth the shilling charged for it.

Manures, a Prize Essay, by S. L. DANA, published by the Mass. Society for the Promotion of Agriculture—from the Author.

Address before the New-Haven Hort. Society, by A. S. MUNSON, M. D., together with the Transactions of the Society for 1842—from N. Darling, Esq. [Mr. D.'s note, though dated Aug. 17, was but recently received. We shall be glad to receive the paper alluded to. Send it by mail.]

The London *Farmer's Journal, Mark Lane Express*, and *Farmer's Herald*, in regular files, from their respective Editors.

"*The Farmer's Mine or Source of Wealth*, by HENRY HEERMANCE—Revised and corrected by A. B. ALLEN, editor of the American Agriculturist."—From the Author. [We presume this must be a good book—indeed, we are quite sure it is, unless the compiler or revisor has so badly mangled several excellent papers, as to render them valueless. For instance, the *first chapter* is *copied* verbatim, from the Prize Essay by one of the Editors of the Cultivator, and without even the poor acknowledgment of quotation marks. In the other chapters, page after page is given from the same Essay, sometimes with acknowledgment, but more frequently without. The other parts are made up from two or three other standard works, with an occasional acknowledgment of the sources from whence derived. Taken together, it is as gross a piece of plagiarism as we have ever seen. The revisor's part seems to have consisted in the introduction in several places, of references to the American Agriculturist. We have not, however, carefully compared the portions taken from our Essay, to see what "*corrections*" have been made.]

☞ We have the pleasure of acknowledging the receipt of a box containing two pair of those fine birds, the *Dorking Fowl*, from our friend L. F. ALLEN, Esq. of Buffalo. The Dorkings are famed for their size and egg producing properties, and those forwarded gave good evidence as to this latter quality. Western New-York is certainly much indebted to Mr. Allen for his efforts at introducing and improving the best animals generally.

THE FARMER'S ENCYCLOPEDIA.—The nos. of this work are regularly issued by Messrs. Carey & Hart, Philadelphia. The article on the "Effects of Climate," in this work, alluded to by our correspondent, J. T. LEIGH, Esq., and which has been so severely handled by our friend Phillips, in the S. W. Farmer, was not written for the Encyclopedia, but copied from Featherstonhaugh's Journal of Geology for 1831. We venture to presume that it was introduced without a proper examination of its statements, as we cannot believe the editor would intentionally have done injustice to the productions of the South.

BLACKWOOD'S MAGAZINE.—The cheap re-print of this work for Sept., has been promptly furnished us by the publisher, J. Winchester, New World Office, New-York, who has nearly ready for the press an abridged edition of Allison's History of Europe, to be published at the low price of $1,00.

PRINCE'S Descriptive Catalogue of Fruit and Ornamental Trees, &c. cultivated at the Linnean Botanic Garden, Flushing, has been received. It will materially aid the purchaser in making his selection.

RIP VAN WINKLE PEAR.—We received about the first of last month, a box of this fruit, from Mr. C. HAMILTON, Canterbury, Orange co., from the tree noticed in our Aug. no. It is a very fair quality, and worthy of being introduced into our collections of this fruit.

THE AMERICAN RAIL ROAD JOURNAL.—Our old friend MINOR, formerly of the New-York Farmer, has resumed the editorship of this work. Among the interesting papers in the July no. is a very interesting account of a visit to the extensive iron works of H. Burden, Esq., near Troy.

CHATTERLY'S REPORT ON AGRICULTURAL EXPERIMENTS.—We acknowledge the receipt from our London correspondent, of a sheet containing the result of a series of experiments made with various substances, on different crops, from which it appears that *sulphate of ammonia* was the most active of these substances, increasing the product in the same kind of soil, from 23¾ bushels of wheat per acre, where none was used, to 32¾ bushels, where 1¼ cwt. per acre was used.

THE SOUTH.—We make the following extract from a private letter of a correspondent in Maryland:—"Your remarks in regard to Dr. Cloud's improved culture of cotton, do you much credit, and I am truly pleased to know that your subscription list is increasing southward. There is no section of our country requires your indefatigable aid more than the south, and I hope to see the day when their agriculture will be improved. From my little experience there, I believe that larger crops can be made than Dr. Cloud's. The very best land I ever looked upon, being a vegetable deposit with sand and clay, and based upon a secondary formation of lime, only produced about 25 bushels of corn to the acre, and ought to grow over 100 with less labor. The corn was planted about 5 feet square, one stalk in the hill, and they were obliged to work it till earing, or the weeds would have smothered it. My astonishment was that they made any corn."

SOLON ROBINSON.—We regret to learn that this efficient and zealous advocate of every measure calculated to improve the character and elevate the standing of the cultivators of the soil, has been removed from the office of postmaster. Holding the pen of a ready writer, and enjoying the franking privilege, Mr. R. has for years past, done much by his private correspondence, as well as by his communications to the Agricultural Journals, to promote the great object in which he has been so zealously engaged. Having lost the franking privilege, his labors must of necessity be somewhat curtailed, as few men can be expected to maintain so extensive a correspondence as he has heretofore done, when the postage on each letter costs nearly a bushel of wheat. Hereafter, we beg him not to pay postage on his letters to the Cultivator; and we second the motion of our friend PHILLIPS of the Southwestern Farmer, by entering the name of SOLON ROBINSON, as a permanent FREE subscriber to the Cultivator.

SOUTH DOWNS.—We call the attention of all amateurs and breeders of fine stock, to the notice of Mr. ROTCH'S sale in another part of this number. The sheep are of the best breeds, selected or bred with great care, and will be found great acquisitions to all who are desirous of placing on their farms some of the best South Downs in the country. The great experience and skill of Mr. R. in the selection and breeding of stock, are sufficient guarantees of the excellence of the animals offered.

Business of an important nature calls Mr. R. to England for the next two or three years, and he will spend a large portion of them in a survey of the agriculture of that and the other portions of Europe, and a thorough examination of their several breeds of improved and other animals; a labor for which he is admirably qualified, and of which the results can scarcely fail of being valuable and important. He will carry with him the best wishes of thousands for his success while abroad, and a safe and speedy return to our American shores.

☞ WE invite particular attention to the advertisement of THOMAS & SMITH, in this number of the Cultivator. Their Nursery, though recently commenced, occupies more than ten acres in compact cultivation, and they have already in fitness for sale, a supply of some of our best fruits. Among these are a fine collection of peaches of more than 10,000 trees of large size and excellent growth. But that which we wish more especially to commend, is the rule which they have laid down as the basis of all their operations; to offer nothing for sale but proved varieties, which they have themselves examined while in a bearing state, and whose excellence and fitness for the climate has been rigidly tested by direct experiment. Though they have availed themselves of an extensive collection of fruit, only a few of the very best are selected for propagation and sale, and the confusion and frequent mistakes arising from a numerous list of kinds is avoided. They have made great efforts in collecting the best fruits from all parts of the Union, and these as they come into bearing are submitted to thorough examination, and those which on strict trial are proved fully worthy, are cultivated for public use.

PROFITS OF A GOOD COW.—We find in the S. C. Register of Agriculture, the following statement of a cow owned by him, for the last 2 years and 3 months. In that time she has given milk for 672 days, and at least eight quarts per day. Milk sells at Columbia, for 12½ cents per quart, and the milk would thus be worth $672. Two calves were sold for 17 dollars, giving a total profit of $689. The expenses were cost of the cow, $11; interest, $1.73; Servant's time milking, $54; food, stabling, &c. at $45 per year, $100. Whole expense, $166.73; leaving a profit of $522.73, or about $196 per year. Putting the milk at the common price at the north, 6 cents, and the profits are still great. The cow is small, and of the native breed. Who would not keep a good cow!

CATTLE SHOW AND FAIR

OF THE

N. Y. STATE AGRICULTURAL SOCIETY FOR 1843.

THE three days of the State Agricultural Cattle Show and Fair, held the present year at Rochester, have been great days for the State of New-York, and Western New-York in particular. With scarcely an exception, every thing passed off in the very best manner; great harmony of feeling, increased zeal in the great cause of agriculture, and the best spirit among all classes assembled to witness the proceedings, characterized the meeting.

The measures and arrangements adopted by the Executive Committee, founded on the experience of the past, were such as to materially contribute to this result; and for the carrying out of these arrangements, too much credit cannot be awarded to the able and indefatigable PRESIDENT of the Society, under whose personal supervision they were mostly conducted. The farmers of New-York have done themselves honor by the splendid exhibition they have thus created, and the public spirited citizens of Rochester have shown even more than their wonted liberality and zeal in every good work, in the promptness and extent with which they responded to the call which the location of the Fair at that place rendered necessary. Filled to overflowing as was the city, by the multitudes that poured in from every point of the compass, and by every means of conveyance, to witness this great annual Farmer's Festival, the public hotels were found utterly unable to accommodate all, and private mansions were freely opened, and a generous hospitality abundantly exhibited.

The milk and honey of Palestine had, in the earliest ages, passed into a proverb, and the wheat and flour of the Genesee Valley, promises to become not much less celebrated. Of this, the massive structures which, under the name of flouring mills, line both sides of the Genesee river in its rapid transit through the city, and which are capable of turning out from five to six thousand barrels of flour daily, as well as the great breadth of wheat seeded yearly in the district, and the beautiful specimens of grain shown at the Fair, furnish the most ample evidence.

The grounds occupied by the Society for their exhibition, were well located on the west side of State street, about a mile from the central part of the city, and if not in quite as picturesque a situation as those occupied at Albany last year were, they were not wanting in interest in this respect. The deep chasm through which the Genesee rushes, after having made the first great pitch of about 100 feet at the city, lay immediately below on the left, and the roar of the falls mingled its cadence with the neighing of the horses, the bellowing of the cattle, and the rattle of the carriages.

About ten acres were enclosed with a close and substantial board fence about ten feet in height, with suitable gates for the ingress and egress of carriages, animals, &c., and from those not members of the Society, invited guests or strangers of distinction, an entrance fee of 12½ cents was demanded at the gate. The experience of last year was strongly in favor of this most reasonable mode of defraying the necessary expenses of the Society, and the result this year would seem to be decisive. It affords the flattering prospect that the Society may hereafter enlarge its sphere of operations, or its list of premiums, and safely rely on the liberality and spirit of the public for support.

The rush of the citizen farmers, mechanics and others, to attend the Fair, was unprecedented and astonishing; and the interest, to the last, appeared scarcely to be abated. Canal boats and trains of cars poured in their thousands daily, and the manner in which the streets of Rochester were blockaded, indicated that every wheel vehicle within 50 miles of Rochester, had by some magician's wand been at once congregated in the place. The number of distinguished gentlemen present from all parts of the country, was greater than at any former meeting of the Society, and the appearance and the interest taken by such men in the cause of agriculture, added much to the general influence of the meeting. Of these gentlemen we have only room to mention ex-President Van Buren, Gov. Bouck, ex-Gov. Seward, Mr. Webster, Mr. Allston from S. Carolina, Mr. Ferguson from Canada, Mr. Gowan of Pa., &c. &c.

The number of animals, and articles of domestic manufacture, on the ground for exhibition or competition, was great, as the reports of the several committees will show, much exceeding in that respect, public expectation generally.

CATTLE.—The show of *Short Horns* was not, on the whole, equal to that of last year, the owners of the fine herds at the east, which are easily centered at Albany, not exhibiting at all, thus leaving the premiums open to the competition of the west, and nobly did the west sustain its high reputation for fine cattle, as all who had the pleasure of looking over the grounds can testify. Few were aware that Western New-York could produce so many fine specimens of improved Short Horns as were on the ground, yet the number present might have been greatly increased. The fine stock of Messrs. SHERWOOD of Auburn, ALLEN of Buffalo, WADSWORTH, HATHAWAY, REMSEN, NEWBOLD, LEROY, &c., attracted much notice, but among this class of animals, few were as much admired as the splendid calf of Mr. CROSBY, of which a figure was given in the number of the Cultivator for September, 1843. These beautiful animals have lost none of the favor with which they were viewed by the public, and as long as their superior symmetry and other valuable properties are so marked, there is little danger to apprehend such a result.

In the show of *Devons*, we think we have never had any thing in the state to compare with it. We can only mention the beautiful animals shown by Messrs. GARBUTT, BECK, and L. F. ALLEN; among those of the latter being of his purchase from Maryland, two heifers and a bull, and finer animals than these we have rarely had the good fortune to look upon. With us, the Devons have been one of the favorite breeds of cattle, and we think an examination of such animals would do away some of the prejudices that may have existed against them. If in weight, early maturity, and milking properties, essential points all admit, the Short Horns exceed them; in adaptation to labor, color, and we think in the quality of the beef, the advantage is on the side of the Devon. It is the general infusion of this blood, which enables New England to bring forth those thousands of pairs of beautiful red working cattle, which constitute one of the most attractive features of their agricultural exhibitions, and of which they are, and well may be pardonably proud.

The beautiful and extensive herd of *Herefords*, owned by Messrs. CORNING & SOTHAM of this city, which attracted so much attention at the last Fair, were much missed, and we hope another such occasion will not be allowed to pass without the presence of at least a portion of them.

Some very fine *Grade animals* were on the ground, particularly a steer from the herd of L. F. ALLEN, and a bull owned by Mr. BROOKS of Avon. This last was a cross of the Durham and Devon, and retained many of the good qualities of both, as his appearance and handling plainly indicated.

It is a matter of regret that so few of our *Native Cattle*, working oxen, and excellent cows, are brought forward by farmers for exhibition at our Fairs. We hope the fashionable slang of "scrubs" and "dunghills," so liberally applied by a few individuals to all animals of this class, has not frightened, and will not dishearten them from exhibiting their best specimens, either for competition or comparison, whenever an opportunity offers. There is a fault in this matter that must be remedied. Comparing animals is one of the surest methods of showing where improvement is needed; and bringing our native stock with grade cattle into contact with the fine improved, will demonstrate to all the necessity and the benefit of crosses in the breeding of animals. There was but one native cow offered for exhibition and premium, and she was well worthy of the distinction, her owner, G. A. MASON, Esq. of Jordan, Onondaga co., having made from her milk in one month, *sixty-seven* pounds of butter.

If those who deal in *Fat Cattle*, must of necessity themselves be fat, there should be some very fat men in the Genesee country. Some ten or twelve head were exhibited in this class, and their mammoth size, beautiful symmetry, and fine proportions attracted general admiration. Beef eaters reveled in anticipation of rich sirloins and broad steaks, while the Grahamite secretly repudiated sawdust bread and meatless bones. The valley of the Connecticut has long carried off the prizes or the palm, in the production of fat oxen, but the farmers of that region must look to it, or their laurels may wither before the cattle fed on the far-famed meadows of the Genesee.

In *Working Cattle*, the exhibition was very gratifying. The challenge of Livingston co. for a sweepstakes of ten yoke of cattle to a county, was not responded to by any of the neighboring ones; but there were, in addition to these from Livingston, a great number of beautiful oxen from Monroe and other counties, showing what the farmers in the Genesee country might do, should they see fit to forsake the culture of wheat for that of cattle. Many of the cattle shown, would have been an honor to any exhibition of stock, and we hope that in every succeeding Fair of the State, a similar improvement in the numbers and quality of the working oxen may be manifested.

Among the working oxen there was one pair which attracted much notice, but which the committee considered as excluded from competition, by being too fat. They were owned by Mr. ROOT of York, Livingston co., twins, of a fine red color, and truly splendid animals in every respect. That they were not too fat to work, the owner demonstrated at the plowing match, by doing his allotment in as short a time as almost any one, and in the best manner. It appeared also that they had performed work more or less nearly every day of the season.

The entries of Cattle for exhibition, were as follows: Bulls over 3 years old, 25—Two years old, 9—Yearlings, 12—Calves, 9—Cows, 23—Two year old Heifers, 19—Yearlings, 23—Calves, 10—Grade Cattle, 15—Native, 4—Working Oxen, 40—Steers, 30—Fat Cattle, 8. Total, 227.

HORSES.—In the display of fine horses, the exhibition of the present year far exceeded that of 1842. It was good both in numbers and in the general excellence of the animals brought forward. The Morgan horse owned by Dr. MAY of Palmyra, attracted no little notice, and we think must be considered a great acquisition to the farming community of the Genesee. The activity and sprightly vigor of the well known horse Bassora, now twenty-six years of age, elicited much remark. It may well be doubted whether any district in our country can produce a better collection of colts intended to form horses for agricultural purposes, than those exhibited at Rochester. The farmers of the wheat growing districts of New-York, may well be proud of many of their horses, and should feel the necessity of bringing them all to the same elevated standard, for in no region are more or better horses required, than in a wheat producing one. The matched horses presented for competition, exhibited nothing remarkable, and could not rank among the best specimens of this noble animal.

Number of Horses entered:—Stallions, 47—Mares and Colts, 71—Matched Horses, 22. Total, 140.

SHEEP.—In sheep, we do not think the present Show has reached that of the last year, at Albany. There were some very fine ones on the ground, but the number was comparatively small; enough, however, to show what improvements may be made in this animal, and the wide difference existing between the close, compact wool of the Merino, the silken texture of the Saxon, and the long, open fleece of the Bakewell or Leicestershire. The animals that appeared to attract the most attention were some fat ewes owned by Mr. CAWARD of Ontario county, and a yearling buck, with a few lambs of the Paular Merino, shown by Mr. JEWETT of Vermont. The South Downs shown by Messrs. SHERWOOD and PARSONS were much admired, and were fine specimens of that variety. It was a subject of regret that a flock of some 30 or 40 pure blood Merinos bred by Mr. Sanford, Vermont, from animals selected from the stock of Mr. Jarvis, and known as the Consul stock, and intended for the state exhibition, should have been so delayed in their transportation as to render it impossible to reach Rochester in season. From the well known character and qualities of those sheep, they could scarcely have failed of being an acquisition to the district, as well as have formed an object of attraction to thousands of farmers at the Fair.

Whole number of sheep entered, 110.

SWINE.—The specimens of swine exhibited were not numerous, being less than fifty, but were in general of very good quality, and fair representatives of the several breeds shown. There were some sows with most interesting families of pigs with them, and one or two of these, belonging to the white Leicester, attracted much notice. Some beautiful Berkshires were on the ground, and their fine forms, in connection with their well known good qualities, elicited much admiration.

DOMESTIC MANUFACTURES.—Some very fine specimens of domestic manufactures were exhibited. Blankets, flannels, cloths, carpets, &c. &c. were shown in great numbers, and reflected great honor upon the individuals whose labor had produced them. This is the domestic industry that should be encouraged, and we cannot but think there are many women who would be far better employed in spinning wool and making tow cloth, than in spinning street yarn and reading novels.

The vast variety of minor articles of domestic manufacture entered for exhibition, will be best understood when we state, that of butter, 9 specimens; cheese, 11; maple sugar, (in samples of 50 lbs. or more,) 4; cocoons, 21; reeled silk, 9; manufactured silk, 25; flannels, 6; linen diaper, 5, were entered on the books for premiums, and a countless number of carpets, hearth rugs, &c. &c. There was but one specimen of cornstalk syrup and sugar offered for exhibition. This was made by Mr. ADAMS of Ogden. The syrup was of good quality, and had much the appearance of ordinary cane syrup or molasses. The sugar was rather darker colored than the Muscovado, owing doubtless to its imperfect draining. The crystalization was good, and the sample such as to afford not only proof that sugar may be made from the cornstalk, but encouragement in the manufacture. The great difficulties to be encountered, are in the rapidity with which the processes, when begun, must be completed, or crystalization will not take place. Experience and skill will overcome these, and the manufacture of corn sugar will, unless we are much mistaken, become an extensive business in many parts of our country.

AGRICULTURAL IMPLEMENTS.—Of agricultural implements there was a great number, and in general well executed. Of plows, there were some 35 or 40 kinds on the ground; among which, we saw some of the fine Worcester or Ruggles & Mason's plows, from that useful establishment, the seed and implement store of B. F. Smith, Esq., Syracuse. We were pleased also to see that Mr. S. had upon the ground a subsoil plow, as well as quite a number of other agricultural implements, such as spades, hoes, hay knives, &c., all of the first quality. The portable mill, of which a figure and description were given in the September number of the Cultivator, was also on the ground, and excited much notice and admiration for the rapidity and excellence of its work. It can scarcely fail of coming into general use among farmers who understand the benefit of having their grain ground before it is fed to their animals. The clover mill of Mr. Burrill of Geneva, was also much noticed. A number of horse powers for working threshing machines were exhibited, and some machines were tested on the ground. The work appeared excellent, and performed the threshing with ease and perfectness. A variety of harrows, wood and iron framed, were shown; but in our opinion, there are none which combine more advantages than the one invented and figured by Mr. Geddes, in a former volume of the Cultivator, especially in its present improved form. A new implement, called by the maker the "*Gang plow*," excited much attention from its novelty and the neatness of its structure. It consists of a square frame work, with four light plow shares attached, with a neap to which the horses are fixed, and rollers to regulate the depth of the implement. It could scarcely fail, in clean soils, to be a most capital implement for covering seed wheat, as in many cases wheat does better after the plow than the harrow, if the plow could be prevented from covering too deep, a serious evil in most instances.

In the HORTICULTURAL DEPARTMENT, particularly in that of fruits, the exhibition was truly splendid, and will go far towards confirming the impression that for all our ordinary cultivated fruits, the vicinity of Rochester is one of the first in the world. The vegetables were, on the whole, good, but had the season not been so uncommonly dry, better ones would doubtless have been on the tables of the exhibition. Beautiful melons met the eye on every hand; and one pronounced by the grower, Mr. S. of Gates, to be the only one of its kind in the world, (it being a species of hybrid, formed by a cross impregnation of the Minorca with the green flesh southern melon,) we had the pleasure of tasting, and can truly say that in our opinion, its flavor has rarely if ever been excelled. The assortment of green house plants was very fine; and although the assemblage of flowers was not great, the skill shown by Mr. King of Rochester, in weaving a quantity of them into a beautiful representation of the American eagle, occupying a central position in the long range of tables, was much admired.

Gen. Harmon of Wheatland, the Le Couteur of America, presented some 13 or 14 samples of wheat, most of which he has tested by cultivation. He also presented specimens of about a dozen varieties in the head, and samples of smut and chess, also in the head. His wheat is most beautiful, the "Improved White Flint" particularly, and we trust he will allow nothing to prevent his progress in the career of improving this important grain, upon which it is evident he has just entered. He exhibited specimens of a new variety, a fine looking wheat, the heads slightly bearded, and as he stated, the product of a cross fertilization of the "Improved White Flint," his favorite variety, with the White Province, a variety lately introduced from France. Should the new variety prove as valuable as it promises, it should in courtesy be termed the Harmon wheat.

THE DINNER.

According to the plan of arrangements adopted by the Executive Committee, the Agricultural Dinner was to come off on the afternoon of the 21st. The time fixed upon was 7 o'clock, and the place, the Railroad Depot near the river. This immense building was separated in two parts, and in the south half, four substantial tables were erected through its whole length, on which plates were laid for 1,000 persons. Contrary to the expectations of all, every ticket was sold in a short time, and hundreds if not thousands disappointed. The arrangements for the feeding part were entrusted to Mr. Carpenter of Stanwix Hall. At 7, the tables were spread, and the depot splendidly illuminated. At a few minutes past 7, the doors were thrown open for the admission of the PRESIDENT of the Society, who escorted Mr. VAN BUREN and the other distinguished gentlemen present. The rush to the tables was tremendous, and the onslaught upon the good things provided by Mr. Carpenter, would have done honor to a band of Missouri hunters. After the dinner had been pretty effectually despatched, the meeting was called to order by Mr. WADSWORTH, who opened the proceedings by a neat and effective address, of which we can only give a brief outline from the hurried notes taken at the time.

He congratulated all present on the success which had attended the labors of the State Society. It deserved success: its object and aims were of the highest, noblest kind; it endeavored to render labor honorable, and cultivation effective. It demanded and deserved universal confidence and cordial co-operation. Science had been pressed into the service of every other pursuit, while agriculture had been permitted to remain overshadowed with darkness, dense as that of the middle ages. It had remained for the present age to unite skill and science in a great effort to render agricultural labor as successful as it was useful.

For years past, the farmer had suffered from an unnatural condition of things. The currency had been at times expanded to a ruinous extent, and then as suddenly contracted, and we were but just beginning to recover from the disastrous effects thus occasioned. The national character had been injured, and it belonged to the farmer to aid effectively in its renovation. National faith and national honor must be placed beyond suspicion.

Mr. Wadsworth spoke a few words on the tariff. He thought the manufacturer had received a disproportionate share of government legislation and attention; that the agricultural interests deserved more attention than had been bestowed. He alluded to the extent of the subject, and said the present was not the proper time to enter upon its discussion. The gentleman from Canada (Mr. Ferguson) had last year expressed, at Albany, the hope that the only field in which this country should meet England, should be the tented field at the Bull's Head. He (Mr. W.) wished to meet her, not on the ocean, but on the plowed field; for so long as by her superior agriculture she raises 40 bushels of wheat to the acre, and we but 15, she will not be an easy nation to beat, though she might be to meet.

In his address at Albany, he alluded, he said, to the election of a Governor from the ranks of the farmer. [He was here interrupted with cheers, mingled with hisses.] Mr. W. forcibly repeated the remark, that it was a matter of pride to the Society that a farmer, able and worthy, had been found to occupy the chair of State, and he regretted that ill health prevented his being then present with them. Mr. W. entered at some length upon a history of the former Presidents; all had retired to their farms, and the influence thus exerted was of the happiest kind. He alluded to Mr. Van Buren, and the pleasure he felt at having that distinguished son of New-York present at the meeting.

After Mr. Wadsworth closed his remarks, Mr. VAN BUREN was loudly called for, and on rising, was received with reiterated cheers.

Mr. VAN BUREN said he should be doing injustice to his own feelings if he withheld an expression of gratitude, first to the men who had invited him to be present at this great holiday of the farmer, and next to those present, for the cordial, sincere and friendly feeling with which his appearance had been greeted. For one purpose, and one only, he rose, and that was to present to that respectable body his unfeigned thanks. He should not attempt to make a speech to those whose object was the prosecution of the useful and the practical, rather than the showy and the ideal. He should not presume to offer practical remarks on agriculture; were it necessary, in him, it would be like carrying coals to Newcastle.

He spoke of the splendid exhibition of the day. His expectations had been high, from the state character of the meeting, and the district in which it took place, and it afforded him pleasure to say that the reality had exceeded his expectations altogether. It was an exhibition of which every American, certainly every New-Yorker, might well be proud. His allusion to the department of domestic industry in the exhibition, as the handiwork of the fair daughters of New-York, was in his most felicitous manner.

Mr. Van Buren then spoke of the pleasure he had taken during the last two years in the management of his farm, and pronounced these two years the happiest of his life. He briefly spoke of his own farm affairs and experiments, with the success attending his efforts at improvement; saying that while his farm of 150 acres formerly barely furnished enough for his use, in the single article of hay alone, it now yielded him a surplus of 80 tons. He spoke of the honorable character of labor, of the necessity of industry, of the value of associated effort, and the excellent influence exerted by such societies in improving and elevating the tiller of the soil.

Mr. Van Buren sat down amid the cheers, cordial and hearty, of the whole assembly.

Judge LELAND of Steuben, one of the Executive Committee, followed in a few remarks on the character of the farmer, the influence he exerts on the affairs of the state and nation, and the consequent necessity of his being well informed, patriotic and independent. He concluded a few pertinent and well directed remarks, by offering the following:—

Gov. BOUCK—It is a credit to the farmers that they have among them a man capable of filling the distinguished office of Governor of this State.

A little before this time, the train from the east, due at 4 o'clock, arrived, and exhibited the singular spectacle of a locomotive and its lengthened train, with its thousand passengers, dashing through the immense dining room usually appropriated to their exclusive use. Three cheers burst spontaneously from the crowd at the novel sight, and three more for Webster, when it was announced that he had arrived.

The President, Mr. W., here arose, and gave—

FRANCIS GRANGER, the favorite son of the Farmers of Western New-York.

Mr. GRANGER rose to reply, amidst reiterated cheers and other tokens of applause. When these had subsided, he said:—

Mr. President and Gentlemen:—The distinguished honor conferred upon me, would seem to demand that I should say something in behalf of western New-York, and yet it would appear scarcely necessary, for when I look around on this vast assemblage, I see you are all here—every man to speak for himself! Well may he who speaks for western New-York feel proud of the duty! I can but feebly express to you the emotions which crowded in my mind, when to-day I took my seat in the cars by the side of the man who raised the *first bushel* of wheat west of Cayuga lake! (Cries of "Who is he?—who is he?" Mr. Granger answered, Abner Barlow, and then three hearty cheers were given for Mr. Barlow by the vast multitude.) Yes—the man in full health and vigor, who sowed the first seed and raised the first crop of wheat in the west! and yet he was even then in the pride and strength of manhood. The world can present no such instance in its history. What is the history of western New-York? It is but as yesterday when it was one vast unbroken forest. When the revolution was over, Yankee industry, Yankee perseverance, would no longer consent to be bound down to the iron coast of New-England or even the high hills of Vermont.

They sought a milder country, which would give a better return to the industry of man—where they could push sooner the advancements of life, and secure earlier its elegancies—the enjoyments of civilization—a broader field for their energies. What has western New-York done? Even in my short day, and short it is, though I am getting a little in the gray of the evening—even in my short day, this city of Rochester was not even a village! When I moved into western New-York, this splendid town, which presents now all the arts of polished life, where the stage proprietor would not even deign to change horses here—he only *watered* and went on, is now a city which *packs* more flour than any other in the world! I repeat it, than any other in the world. I have heard this contradicted, but facts and figures will make manifest its truth, and to them I appeal.

It has been asked, where are the pioneers of western New-York? The grave has closed over most of them, but there are many still living among us to give to their children encouragement and advice—to tell them to "be sure they are right, then go ahead." I have taken by the hand many a man to-day, who thought an eminent land proprietor mad when he told them that the time would come, in their and his day, when the stage would go *twice a week* from Canandaigua to Albany, and yet the little train in which I came over to-day, had only only eleven hundred!

Such is western New-York: its progress and history have solved the doubt which many entertained, whether it was not a problem whether there was sufficient energy in a republican government to push forward and hold up and force forward towns and settlements. What Rochester has done, others in our land also have; Cincinnati in Ohio is a town larger than that famed Odessa, which the whole power of Russia for fifty years has been building up. But I must close. When I arose, I only intended to speak ten words, but I thought I must say one thing in answer to the reference to western New-York.

I will say, if there be a man on earth who, when he sinks to the grave, can do so with thoughts of happiness, it must be the pioneer of western New-York—he who has lived to see, through those fruitful fields where once was the roam of the savage, yonder train pursue its arrowy flight.

Mr. President, I offer you—

The Pioneers of Western New-York—They descended from Pisgah to enjoy the promised land.

Mr. WEBSTER now appeared, amidst the cheers of the multitude, and made a few remarks on the rapid journey he had made for the purpose of meeting on their own soil the farmers of western New-York. Agriculture, he said, was one of the first steps in the civilization of man. He spoke of the advantages of western New-York, its rich soil, and its future prospects, but his fatigue was so great, that he said he must decline at that hour from entering upon such extensive subjects, as he should have the pleasure of meeting them again to-morrow.

Mr. FERGUSON of Canada, followed Mr. Webster in a happy effort, as we should believe from the little it was our good fortune to hear; but the immense crowd had by this time become so perfectly uproarious, that speaking was useless and hearing impossible. Mr. Ferguson closed with the following:—

The health of my honorable and distinguished friend, the President of the State Agricultural Society.

Mr. WADSWORTH made a brief reply; and after a few other toasts, among which was one by Mr. Barlow, the gentleman alluded to by Mr. Granger, the company broke up in most admired disorder. It was manifest at an early hour of the evening, that notwithstanding the great efforts of the President to preserve order, they must, from the great space occupied, and the multitude present, be useless. To attempt a full report of the speeches was useless, and for the sketch given of Mr. Granger's, we are indebted to the editor of the Rochester Democrat, whose position for hearing that gentleman was more favorable than our own.

The 21st was to be devoted to the plowing match, and to hearing the Annual Address from Dr. BEEKMAN of Columbia county, one of the earliest and ablest friends of the State Society, and to the reading of the reports of the several committees.

The plowing match was to come off at 10 o'clock, on the farm of Mr. Pitkin, near the eastern limits of the city. The great number of entries as competitors—26 in all—rendered it necessary to select a larger field, and the trial of skill did not commence until about 11 o'clock. Mr. VAN BUREN, Gov. BOUCK, Mr. WEBSTER, Ex-Gov. SEWARD, &c. &c. were on the ground to witness the honorable strife. After all, room could be found for only 18 plows, but these set about their work with a hearty good will, which gave great interest to the whole proceeding. One-fourth of an acre was allotted to each team, with an hour and ten minutes for the performance, reference being had rather to the excellence of the work than the quickness of the time. No drivers were allowed. It was soon evident that the teams as well as the holders of the plows were fully versed in their business. Steady, true and strong, their progress was watched with exciting interest, and so excellent was the work of all, that scarcely two of the thousands of spectators could agree as to the individuals to whom the premiums should be awarded. The work was all beautifully done up within the allotted time, and all agreed that finer specimens of plowing would be found with great difficulty.

As soon as the plowing match had closed, the tide of human beings began again to flow towards the show yards, where preparations had been made for the delivery of the Annual Address. There was a brisk breeze from the west, but the position of the speakers' stand was so well selected, that probably the speakers were better heard, than they could have been in any building sufficient to contain but a tithe of the immense crowd, estimated at 20,000, that thronged around the stand. Mr. WADSWORTH, the President of the Society, in a few pertinent remarks, introduced Dr. BEEKMAN to the audience, when he proceeded to deliver an address which was listened to with great interest. As we shall publish it at length at the earliest opportunity, we shall only say that it was admirably written, couched in beautiful language, and full of important truths. He gave a rapid sketch of the origin of the Society, the difficulties it had encountered and surmounted, the establishment of the

Cultivator, the rapid advances of husbandry, as aided by science and art, the present condition of our agriculture, and the probability of its future progress, as new light was cast on the operations of nature, and man was taught successfully to imitate them. His remarks on labor and honest industry were most appropriate; and if there was a man or woman in that vast assembly that had doubted whether a person could labor with their hands and yet remain respectable, they must have had their doubts removed.

When Dr. Beekman concluded his address, the reading of the reports was commenced and a portion of them completed, when during an interval, Gov. SEWARD was loudly called for, and prompt in his response, delivered one of the most happy and spirited addresses of the day. By some it might be considered as trenching on forbidden ground—the passing politics of the day—but his allusions were so brief and in so good temper, as entirely to divest them of any offensive peculiarity, and cause the sentiments to be received with enthusiastic cheering.

The reading of the reports of committees was then resumed and completed, and with the performance of this duty, and the payment of the numerous premiums awarded, the Third Exhibition of the State Agricultural Society, under its present efficient organization, was closed.

On the evening of this day, about 150 gentlemen, principally members of the State Agricultural Society, partook of a dinner prepared by Mr. Carpenter of Stanwix Hall. Hon. DANIEL WEBSTER, Gov. SEWARD, Col. ALSTON of South Carolina, Messrs. GOWAN and ROBERTS of Pennsylvania, Mr. FERGUSON of Canada West, &c. &c. were present. Mr. Van Buren and Gov. Bouck had left the city. Mr. Wadsworth, president of the Society, presided, assisted by Messrs. Beekman, Leland and Nott. After the substantial part of the repast, the president, in some beautiful remarks, alluded to the distinguished services of Mr. Webster, and gave as a toast, "The health of the Farmer of Marshfield." To this, Mr. W. responded in a speech of an hour and twenty minutes. His theme, principally, was the right of agriculture to the protection of government, and the intimate connection existing between agriculture and manufactures. A variety of other speeches were made by gentlemen present, particularly by Messrs. Seward, Alston, Ferguson, Gowan and Morgan. The evening passed pleasantly, and will long be remembered by those who had the happiness of being present.

We should be pleased to add some notices of matters that interested us much at the time, and articles that appeared peculiarly adapted to the wants of our agricultural community, but the limits we have allotted ourselves forbid. We cannot, however, close without congratulating the numerous readers of the Cultivator on the triumphant success of the State Society thus far, and the prospect of its long continued usefulness. Of the interest it has awakened, and the earnest attention with which its progress is viewed, the tens of thousands of farmers and others that crowded Rochester during the Fair, furnish the best evidence. To us, who have known the western district almost from its settlement, the whole proceeding, from the sweeping past lake, river and woodlands in the long trains of cars, to looking on the moving mass assembled on the show ground, seemed more like the work of magic than sober reality. There, by our side, stood the man who had sowed the first bushel of wheat in a country which years ago had acquired the name of the granary of America, and upon that spot had grown up a town second in beauty, wealth and intelligence to few, if any, in the country. Such we thought, at least, as we on our return passed the place in the village of Canandaigua where this veteran pioneer first planted himself.

It has required much time, labor and expense to place the State Agricultural Society in the position it now occupies; it will require labor, attention, and the continued favor of the public to sustain it in the career of usefulness to which we trust it is destined. So long as it confines itself to the duties assigned it—so long as it is the nucleus around which agricultural talent gathers, to better diffuse the knowledge so much needed by the many—so long as it continues the beacon light of the state, to guide, direct and encourage the farmer in all endeavors to improve and better his condition, so long and no longer will it receive or deserve the favor with which it is now looked upon, and the continuance of which is so essential to its usefulness. We can only say in relation to it, that the past is full of experience, and the future full of promise.

Very much of the interest with which the proceedings were viewed, was owing to the great number of distinguished gentleman, farmers and others, from other states, many of whom had appointments on important committees, and the duties of which were arduous, involving the exercise of close attention and sound judgment. How well they performed their duties, the acquiescence, almost without a single murmur from any source, of the competitors for premiums, is the best evidence. For the services so kindly and judiciously rendered, we here return them the thanks of the Society, and the agricultural public of New-York.

RECEIPTS AT THE FAIR.—The subscription papers, list of members, &c, not having been received from Rochester, we are unable to give a statement of the receipts from these different sources this month. The receipts on subscriptions, for memberships, and for admission to the Show grounds, will be given in our next. In the meantime, we may say, that the receipts from all sources amounted to about $3,000, including $328 from the Monroe Ag. Society.

It cannot be amiss to notice here, the great advantages derived by the merchants, traders, mechanics, &c. of those places selected for holding the State Fairs. The immense influx of strangers and others, from the country around, will always leave large sums of money wherever the Fairs are held, and thus promote extensively the interest of all parties. This is becoming yearly more apparent, from the increasing interest felt in the proceedings of the Society, and the consequently greater numbers that attend the exhibition.

On the afternoon of the 22d, we accepted the invitation of the President of the Society, to visit his residence in the Genesee valley, about 28 miles south of Rochester, and in company with several other gentlemen, had a most delightful excursion. The rich valley of that river never appeared to better advantage, and the broad fields from which wheat had been taken, and the extensive ones just seeded, pointed out the great source of wealth in the district. Of this excursion and our visit to the princely farm of the President, we took ample notes, which we intend hereafter to lay before our readers.

LIST OF PREMIUMS,

Awarded at the Rochester Meeting of the N. Y. S. Ag. Soc.

CATTLE.

Bulls.—1st, to L. F. Allen's "Mayduke," Durham, bred by the Hon. Adam Ferguson, Canada West, $20—2d, to J. S. Wadsworth's "Rocket," Durham, $12—3d, to Lorenzo Hathaway's "Welham," Durham, $8—4th, to D. H. & S. Brooks' "Defiance," Durham.

Two Years Old Bulls.—1st, to P. A. Remsen, $15—2d, to N. Chappell, Avon, $10, (both Durhams,)—3d, to E. P. Beck, Sheldon, for his Devon Bull, $5—4th, to Guy Collins, Bloomfield.

Special Premium to C. S. Button, Newark, for his two years old bull "Osceola," $5.

Yearling Bulls.—1st, to C. F. Crosby, Watervliet, for "Osceola," $15—2d, to A. & J. McArthur, Buffalo, $10—3d, to T. H. Newbold, Caledonia, $8, (all Durhams,)—4th, to E. P. Beck, Sheldon, Devon.

Bull Calves.—1st, to J. M. Sherwood, Auburn, for his "Logan," $10—2d, to John Johnston, Fayette, $6—3d, to L. F. Allen, Buffalo, for his "Ben," $4, (all Durhams,)—4th, to L. F. Allen, for his "Rover," Devon.

Cows, Class V.—1st, to J. M. Sherwood, Auburn, for his "Pansy," $20—2d, to John Johnston, $12—3d, to L. F. Allen, $8—4th, R. H. Higham, (all Durhams.)

Heifers, Class VI.—1st, to T. H. Newbold, $12—2d, to Anson Packard, Bristol, $8—3d, to J. M. Sherwood's "Sylph," $5—4th, to L. F. Allen.

Heifers, Class VII.—1st, to J. M. Sherwood's "Phillippine," $10—2d, to L. F. Allen's Devon, $5—3d, to T. H. Newbold's "Isabella."

Heifer Calves.—1st, to Wm. Cook, Lysander, $8—2d, to P. A. Remsen, $5—3d, to L. F. Allen.

Grade Cows, Class IX.—1st, to David Brooks, Avon, $12—2d, to Jehiel Freeman, Geneseo, $9—3d, to George C. Latta, Greece, $6—4th, to Allen Ayrault, Geneseo.

Heifers, Class X.—1st, to E. A. LeRoy, Caledonia, $10—2d, to T. H. Newbold, $7—3d, to Anson Packard, $5—4th, to J. R. Murray, Mount Morris.

Heifers, Class XI.—1st and 2d, to Calvin Ward, Richmond, $15—3d, to W. W. Wadsworth, Geneseo.

Native Cows.—1st, to Andrew Snyder, Henrietta, $10—2d, to Wm. Sternberg, Henrietta, $8—3d, to George A. Mason, Jordan, $5.

There were no Native Heifers, Class XIII, exhibited.

Dairy Cows, Class XIV.—1st, to George A. Mason, $15, being the only animal exhibited in this class.

Working Oxen.—1st, to P. A. Remsen, $15—2d, to ——— Stoddard, Onondaga county, $10—3d, to H. Long, York, $5—4th, to Jehiel Freeman.

Three Years Old Steers.—1st, to John P. Root, York, $10—2d, to Allen Ayrault, $5—3d, to ——— Allen, Syracuse.

Two Year Old Steers.—1st, to Allen Ayrault, $8—2d, to John Ayrault, Perinton, $4—3d, to W. W. Wadsworth.

Yearling Steers.—1st, to Roswell Root, York, $8.

Fat Cattle.—1st, to Jeremiah Brown, Ridgeway, $20—2d and 3d, to W. A Mills, Mount Morris, $12.

HORSES.

Stallions.—1st, to Henry Paddock, Penfield, and George Fordon, Geneva, for "Alfred," a Cleaveland Bay, imported by Thomas Weddle, $20—2d, to Dr. Wm. May, Palmyra, for "Morgan Tiger," $12—3d, to E. Holloway, Lima, $8—4th, to Alex. Baldridge, Romulus.

Three Years Old Stallions.—1st, to Kinzey Stottle, Chili, $10—2d and 3d premium not awarded.

Breeding Mares and Colts.—1st, to Alex. Baldridge, $20—2d, to Truman Roberts, $12—3d, to Guy Markham, Rush, $8—4th, to Milton Sheldon, Mendon.

Three Years Old Mares.—2d, to J. K. Ballentine, Chili, $5.

Matched Horses.—4th, to J. R. Parker, Rochester. No others awarded.

SHEEP.

Long Wooled Bucks—1st and 3d, to Wm. Swales, Sodus, $15—2d, to Thomas Terry, Mount Morris, $8—4th, to John Battridge, Riga.

Long Wooled Ewes.—1st, to Allen Ayrault, $10—2d, to Luke Chesebro, Auburn, $8—3d, to James Beatty, Greece, $5—4th, to Wm. C. Cornell, Henrietta.

Lambs.—Best pen of 5, to Wm. C. Cornell, $5.

Middle Wooled Bucks.—1st, to J. M. Sherwood, $10—2d, 3d and 4th, to James Parsons, Riga, $13.

Middle Wooled Ewes.—1st, to J. M. Sherwood, $10—2d, Richard Randle, Chili, $8.

Lambs.—Best pen of 5, to J. M. Sherwood, $5.

Saxon Bucks.—1st, to Charles Colt. Geneseo, $10—2d, to Roswell Root and brother, York, $8—3d, to Norman Frisbee, Vernon, $5—4th, to Gideon Cobb, Brighton.

Saxon Ewes.—1st, to Chas. Colt, $10—2d, to Roswell Root and brother, $8—3d to Norman Frisbee, $5.

Lambs.—Best pen of 5, to Roswell Root and brother, $5.

Merino Bucks.—1st, to Edmund Fellows, Chili, $10—2d, to Luke Chesebro, $8.

Fat Sheep.—1st, to George Cayward, Seneca, $10—2d, to T. Norman, $5—3d, Wm. Swailes, Sodus.

SWINE.

Boars.—1st, to H. O. Hills, Vernon, $10—2d, to Daniel Budd, Greece, $8—3d, to S. Tibbits, Pittsford, $5—4th, to N. Hayward, Brighton.

Sows.—1st, to R. L. Allen, Buffalo, $10—2d, to Wm. Wheeler, Rochester, $8—3d, to John Langham, Rochester, $5—4th, to P. A. Smith, Greece.

BUTTER AND CHEESE.

Butter.—To H. Morrison, Orange co., $8—to A. D. Porter, Canandaigua, $5—to D. Wood, West Bloomfield, $5—to Wm. Sternberg, Henrietta, $5—to Isaac Seely, $4—to E. S. Bartlett, Romulus, $3—to D. Pifford, Livingston co., $2.

Cheese.—To T. Burch, Herkimer co., $7—to P. Hathaway, Farmington, $7—to H Arnold & Son, Hamburg, $6—to Jerome Ives, Jefferson co., $5—to Newberry Bronson, Warsaw, $5—to John Lapham, Farmington, $2.

FARMING IMPLEMENTS.

Threshing Machines.—1st, to Joseph Hall. Rochester, $20—2d, to J. Hale, North Bloomfield, $10—3d, to B. M. Freeborn, New-York.

Horse Rakes.—1st, to L. Swift, Clarkson, $8—2d, to G. W. Wiggins, Lima $5—3d, to J. Holbrook, Penn Yan.

Straw Cutters.—1st, to N. Parish, Rush, $8—2d, to J. W. Webb, Rochester, $5—2d, to R. P. Gibson, New-York.

Fanning Mills.—1st, to A. S. Patterson, Rush, $8—2d, to A. P. Dickey, Elba, $5—3d, to Stevenson & Myers, Port Byron.

Cultivators and Grain Coverers.—1st, to Harlow Mitchell, Rutland, $8—2d, to C. Wright, Adams, $5—3d, to B. Langdon, Troy.

Harrows or Drags.—1st, to M. Adams, Ogden, $3—2d, to A. Thompson, Manchester, $5.

Grain and Seed Drill.—1st, to A. Randall, Verona, $8—2d, to N. Adams, Boston, $5.

Clover Mill.—T. D. Burrall, Geneva, diploma.

Grain Cradle.—C. Goss, Madrid, $5.

H. H. Davison, Rochester, for a valuable contrivance for fixing the scythe to the snath, vol. Trans.

Wm. Gates, Barre, Orleans co., for a new and singular contrivance for raking grain after cradlers, $5.

Julius Hatch, Rochester, sowing machine, $5.

Wm. G. Borland, machine for smutting grain, diploma.

Jira Wing, Hume, Alleghany co, plan for constructing eave troughs for barns, &c. $5.

A. L. Blanchard, Albany, statue stoves, $5.

Sam'l Malony, Alexander, Genesee co., machine to drain roads and fill ruts, $5.

H. H. Everts, Mt. Morris, machine for cutting straw, &c. $3.

L. Bostwick, New-York, portable grain mill, $5.

T. R. Hussey, corn and cob crusher, $5.

MAPLE SUGAR.

Maple Sugar.—1st, to Joel Woodworth, Watertown, $15—2d, to David Dow, Batavia, $10.

SILK.

Cocoons.—1st, to Mrs. E. M Reed, Rochester, $15—2d, to Justus Beardsley, Perinton, $10—3d, to Wm. B. Brown, Ogden, $5—to E. Stanley and John Adams, Ogden, and E. Murdock, Le Roy, each $3.

Reeled Silk.—1st, to N. D. Hart, LeRoy, $15—2d, to John Adams, $10—3d, to J. M. Hathaway, $5—4th, to Samuel R. Tracy.

Manufactured Silk.—1st, to Mrs. D. Carter, Bloomfield, $15—2d, to David Irish, Perryville, $10—3d, to Mrs. J. Howe, Avon, $5—4th, to E. Stanley, Ogden.

Silk Reel.—To E. Stanley and Seneca Reed, each a vol. of Trans.

Silk Cape—To Mrs. Raymond, $2.

Hose.—To Eliza B. Orcutt, Centreville, $2.

Shawl—To Mrs. R. Carter, Albany, $2.

Twist—To S. Haskins, LeRoy, $2.

Sewing Silk.—To B. M. Benedict, Bergen, $2—to Enos Holmes, Clarendon, $2.

DOMESTIC MANUFACTURES.

Woolen Blankets.—To David T. Lee, Darien. $5.

Flannel.—To George Webb, Pamela, $5—Hart Massey, jr Watertown, $2,50—O. Allen, Wheatland, $2,50.

Woolen Cloth.—To Clark Corbin, Ovid, $5.

Woolen Carpet.—To Jon. J. Gillam, East Bloomfield, $5.

Double Carpet Coverlet.—To James A. North, Alexander, $5.

Linen.—To Mrs. A Halleck, Westmoreland, $5.

Linen Diaper.—To Ezra Bishop, Attica, $5.

Hearth Rug.—To ——— ———, $3—J. M. Rockwood, Pittsford, $1,50—Mrs. J. L. Clark, Clarkson, $1,50.

Kersey.—To S. M. Hanford, Perrinton, $3.

Rag Carpet.—To Orlando A. Hall, Parma, $3.

Tow Cloth.—To David J. Lee, Darien, $3.

Sewing Thread.—To Ezra Bishop, Attica, $2.

Wove Stockings.—To Ezra Bishop, $1.

Knit Stockings.—To Miss S. R. Eastman, Lodi, $1.

VEGETABLES.

Celery.—To Richard Cooper, Rochester, $2.

Carrots.—To Abner Bryant, Buffalo, $1—C. F. Crosman, Rochester, vol. Trans.

Bassano Beet.—To Abner Bryant, vol Trans.

Blood Beet.—To N. Hayward, Brighton, $1.

Parsneps.—To William Hamilton, Rochester, $1.

Onions.—To Abner Bryant, $1.

Cabbage.—To John Mulholland, Brighton, $1.

Tomatoes.—To E. Tyler, Buffalo, $1.

Egg Plants.—To John Mulholland, $1.

Beans.—To A. H. Steen, Mount Morris, $1.

Curled Parsley—To E. Waugh, $1.

Table Squashes.—To H. N. Langworthy, Irondequoit, $1—C F. Crosman, $1.

Pumpkins—To Wm. Hamilton, $1.

Watermelons and Muskmelons.—To H. N. Langworthy, $1.

Seed Corn.—To J. S. Wadsworth, Geneseo, $1.

Seed Sweet Corn—To C. F. Crosman, $1.

Rice Corn—Wm. Blossom, Canandaigua, vol. Trans.

Table Potatoes.—To N. Hayward, Brighton, $2—to A. Fitch, Riga, $1.

Best variety Seedling.—To E. Murdock, LeRoy, $5—to H. N. Langworthy, diploma.

Specimens of Cabbages and Potatoes.—To M. Eisenbeck, Rochester, diploma.

FRUITS.

Greatest variety of Table Apples.—To David Thomas, Cayuga co., $5—to B. Hodge, Buffalo, $3—to O. Phelps, Canandaigua, vol. Trans.

Twelve best Sorts.—To Abner Bryant, Buffalo, $3.

Best new Seedling.—To Jon. Buel, West Bloomfield, $5.

Table Pears.—To David Thomas, $3.

Winter Pears.—To David Thomas, vol. Trans.

Quinces.—To Nathaniel Draper, Brighton, vol. Trans.

Peaches—To N. G. Hotchkiss, Vienna, do.

Plums—To Isaac Hills, Rochester, do.

Native Grapes—To J. W. Smith, Rochester, do.

Foreign Grapes.—To Elihu Tyler, Buffalo, do.

FLOWERS.

Greatest Variety and Quantity.—To Elwanger & Barry, Rochester, $5—to Miss Wadsworth, Genesco, $3—to Mary P. Utley, vol. Trans.

Best Floral Ornament.—To Wm. King, Rochester, $5.

Bouquet of Asters.—To Henry Billings, vol. Trans.

DISCRETIONARY PREMIUMS.

Glass.—Wm. S. DeZeng, Geneva, plain and colored glass, $10.

Honey.—G. A. Gates, Mt. Morris, 2 vols. Trans.—Thomas Wiltssee, vol. Trans.

Flour.—E. S. Beach & Co., "Akron Mills, O." Rochester, diploma.

Woolen Yarn.—H. Loomis, Rochester, diploma.
Carpet Bag.—Mrs. R. Holmes, Rushville, diploma.
H. Massey, jr. shawl, $3.
Geo. Webb, Pamela, Jefferson co., trunk, diploma.
Mrs. P. Saxe, Yates, star quilt, $5.
T. Bingham, Riga, table cloth and quilt, $3.
H. Mitchell, Rutland, Jefferson co., transverse sawing machine, $3.
W. C. Cornell, Henrietta, lamp mat, diploma.
A. S. Platt, Batavia, penmanship, do.
Theo. Backus, Rochester, knit gloves, do.
Matilda L. Davis, Batavia, embroidered shawl, $2.
S. H. Boardman, Henrietta, bee hives, $5.
S. B. Dewey, Rochester, do. diploma.
S. Davidson, Greece, new variety of wheat, 2 vols. Trans.
S. H. Boardman, Henrietta, linen sheets, diploma.
E. B. Slason, Albany, coach harness, saddles and bridles, $5.
D. R. Barton, Rochester, pitch forks, axes, hay knives, bush hooks, diploma.
Mrs. E. R. Jewett, Buffalo, embroidered table cover, $5.
Mrs. Lindsay, Black Rock, cambric quilt, thread lace, $5.
J. W. Bacon, Waterloo, embroidery, $3.
Mrs. A. Hallock, Westmoreland, black and white lace veil, $3.
J. L. Elwood, Rochester, bbl. plaster, diploma.
B. Harmon, jr., Wheatland, 14 specimens of wheat, $10.
O. A. Hall, Parma, needle work, vol. Trans.
T. C. Peters, Darien, Farmer's Account Book, 2 vols. Trans.
Andrew Menely, West Troy, church bells, diploma.
Mary Chedsey, Penn Yan, door mat, ottomans, footstools, $5.
Mrs. R. Holmes, Rushville, quilts, $3.
Nathan Post, Madrid, St. Lawrence co., Patent felt and leather collar, $3.
A. Dow, Bethany, shawl, $1.
Lucy M. Shaw, Richford, Tioga co., tuscan straw bonnet, of native grass, $8.
——— Hopkins, Auburn, English teazels, 2 vols. Trans.
Louis Chapin, Rochester, fig tree, vol. Trans.
Wm. Richardson, Albany, parasol, diploma.

PLOWING MATCH.

1st, to J. Howell, Chili, (Mr. Pare, plowman,) $15—2d, to W. Utley, Phelps, $13—3d, to W. Craig, York, $8—4th, to George Sheffer, Wheatland, (John Sall, plowman.)

BEST METHOD OF CURING CORN.

Our Indian corn crop is one of the most valuable, if not *the* most valuable crop cultivated in the United States, and every thing relative to the best methods of growing and securing it are proportionably important. In securing Indian corn, two methods are commonly used; the first, is to top the corn, by cutting the stalk immediately above the ear, and this is usually done as soon as the grain is glazed, though some farmers scarcely wait for this. The second, is to cut up the corn by the bottom as soon as the ear is glazed, bind the stalks and ears in small bundles, set them up, and let them stand till thoroughly cured. In the first method only the upper part of the stalk is saved for fodder, but the corn ripens finely, and nothing can be more beautiful than a field in which the husks have fallen from the ripened grain, and the thick golden ears give a promise of the rich harvest at hand. Still we prefer the second method, and that from ample experience of both. We have our corn cut up by the bottom, because in that way we save the whole of the stalks for fodder, and that is no unimportant matter to the farmer. In topping, only the poorest part of the stalk is saved, for if cut and cured properly, there is no more nutritious food for animals than the stalk of corn. It is true, when very large, cattle and sheep are unable to eat them; but if converted into chaff by a cutting machine, as they can easily be, there is no food eaten more readily, or with more profit. It is not hazarding much to say that there is more value in an acre of cornstalks cut by the bottom and properly fed out, than in an acre of ordinary hay, and no farmer can afford to dispense with such an item in providing for his stock. But the saving in the stalk is not all; experiments show that there is a gain in the grain of nearly 20 per cent in cutting by the bottom, in preference to topping. Experiments made by Mr. Clark, Judge Buel, and others, and recorded in the volumes of the Old Genesse Farmer, and the Cultivator, place this matter beyond a doubt. In one made by Mr. Clark, he found the yield per acre of the corn topped, to be 47 bush. 18 lbs., and the untopped, 60 bush. 8 lbs. From some experiments instituted by ourselves several years since, it was ascertained that there was no difference of consequence in the product, when the corn was left on the untouched stalks till harvest, and when they were cut by the bottom after the corn was well glazed, but that both these methods gave a greater product than when topped in the usual manner. It is said that when corn is topped, and after the corn is gathered, that cattle will eat all that is valuable of the stalks as they stand in the field. This is certainly a mistake, as the most nutritious part, the main stalk itself, is generally left untouched by them. If the corn crop is well manured, as it should be, the cultivation of the season is an excellent preparation for wheat, and some of the best farmers of our country use the corn crop for this purpose. In this case cutting up by the bottom is indispensable for the getting in of the wheat properly; and if it is intended to follow the corn with spring crops, as is frequently done, such as wheat, oats, or barley, it will be found that the absence of the large stalks that disfigure corn grounds when only topped, will greatly facilitate both the putting in, and the harvesting of these crops. For all these reasons, and the additional one, that it is only by cutting at the bottom that corn can be saved from the effects of early frosts when they occur, we are decidedly of the opinion that the corn crop of the country might annually be increased in value, were the method of cutting it by the bottom as soon as the grain is fully glazed, to become general.

For the relief of secret sorrow and the preservation of deep rooted joy, the only resource is to be found in heartfelt piety.

SCOTCH HIGHLAND AGRICULTURAL SOCIETY.

The annual meeting of this first of Agricultural Societies, was this year held at Dundee, in the early part of August, and our kind friends in that part of Great Britain, have put us at once in possession of the proceedings. In the numbers attending, the vast herds of beautiful animals on the ground, and the general interest and satisfaction evinced by all, the present Show appears to have eclipsed all that have preceded it. In this meeting, politics and party are cast aside, and rank, wealth, and intelligence unite to render the occasion worthy of its name. Our Agricultural Envoy, Mr. Colman, was present, and replied to a complimentary toast in his usual felicitous manner. We have no room for particular details, but it is gratifying to every true friend of agriculture to witness the spread of the interest felt in its success, and the efforts made to place the tiller of the soil in his true position. The show of the Short Horns was the finest part of the exhibition, (and wherever they are found, where is this not the case?) the animals being superior to any that have been shown at the Society's meetings. The show of horses, particularly of mares, was very fine; and Mr. Webb of Babraham, from whose flock Mr. Rotch derived some of his finest sheep, sent some of his animals 400 miles to compete for the prizes, one of which, the premium for the best shearling ram, 10 guineas, was obtained by him.

THE HORSE, BY YOUATT.

One of the most useful books which the impulse given to agricultural knowledge within a few years, has produced, is the work on "The Horse," by Youatt. Since its publication in 1831, its sale has been great and constant, and its circulation considerable even in the U. States. A new edition, prepared by T. Coates, was published in London last March, and this we are happy to say, has been re-published by Lea & Blanchard, in a beautiful style, and at a cheap rate. But the principal additional value of this new American edition, is a thorough revision to adapt it the more exactly to the circumstances of this country, and a most valuable introduction, by J. S. Skinner, well known for his labors in the cause of agriculture, and editor of the Turf Register. The introduction shows Mr. Skinner to be a thorough master of his subject, and the mass of information he has brought together on the history of the horse, the improvement, character, and performances of that noble animal, is such as could have been collected only by one who understood and appreciated the subject of which he was treating. He has also added a valuable essay on the Ass and the Mule.

The history of the English horse, from which ours is derived, as traced by Mr. Skinner, from the first notice of them in the days of Julius Cæsar, when they became great favorites at Rome; the successive importations and infusions of German, French, Spanish, Barbary or Arabian, and Flemish horses, with the effect of these various crosses, is most admirably given by Mr. S., and did our limits permit, we should at once lay it before our readers. He shows that the finish of excellence was given to the English horse, by the Darley Arabian and Godolphin, to such a degree, that in speed and strength, no improvement has since been made by crosses with the Arabian or other breeds. The *turf* he considers the great foundation of improvement in the horse, and that the blood of the thorough bred, is the true source to which we must look for bone, muscle, and action, all in the right place. By skillful crosses with other breeds, the hunter, roadster, and the best farm horses, have been produced, animals of far more practical value than the thorough bred animals for all the purposes named. It strikingly illustrates and supports the position, that by skillful selection and crossings, cattle may be produced of which the Short Horn shall be the base, superior even to that celebrated breed for domestic and agricultural uses. The improvement of animals, or the science of crosses, we consider as but in comparative infancy; and we hail with pleasure a work like the "Introduction," calculated still farther to advance this great interest. We thank Mr. Skinner for this volume, and the labor he has bestowed upon it; it will prove a most acceptable present, we cannot doubt, to the public, and should be in the hands of every one who keeps a horse.

SMUTTY WHEAT.

It is a fact not to be disputed, that a very large portion of the wheat grown in the United States the present year, contains more or less smut. We notice complaints of it from every quarter, and almost every state, and in many cases the quantity present will be a serious drawback on the value of the crop. To what is this general prevalence of the smut to be attributed? Not to any thing unfavorable to the crop during the present season, for all are aware that the quality of the wheat grown was never better; but in the midst of this beautiful wheat, the dark green, upright ears of smut, some lower and some higher, were generally to be found, the berry as plump as that of the pure wheat, but fœtid, nasty, black, sure to injure it for seed, or spoil flour, if ground in mills not furnished with the best apparatus for cleaning.

Two probable causes only can be assigned, and of these both may have been active, or more or less co-operated to produce such a result. One cause assigned, is the unfavorable state of the weather during the month of September, or the time in which the wheat crop of this country is usually put in. From the 6th to the 20th, there was scarcely a day in which some rain did not fall, and those who took advantage of the best days to sow, were obliged to do it on ground unfit for the reception of seed; while those who were from the condition of their fields obliged to wait, sowed too late, and in most cases on soils still too wet for healthy germination and vegetation. The unfavorable condition of soils generally at the time of sowing, and the lateness of putting in seed generally, cannot be denied; but we think the perishing of so large a portion of the plants during the winter, rather than the smut, the result of this late or unfavorable sowing; as we have seen smut in abundance from fields sown early, and while the soil was in first rate order.

The other cause to which we have alluded as the cause of the increase of smut, is the decrease of the practice of liming wheat before sowing. 30 years since, smut in wheat was one of the greatest evils the farmer had to encounter. The practice of soaking or washing seed wheat in brine, and then drying it with quick lime, was discovered and generally adopted, and in a few years smutty wheat nearly ceased to be known. Many farmers, it is true, were too lazy or careless to lime their wheat, but such frequently purchased their seeds from those who had grown it pure by that treatment, and for many years it was rare to find a load of smutty wheat sent to market. The danger apparently past, the practice of brining and liming has gradually fallen into disuse, even with good farmers, and the natural result has been, that smut in the wheat crop is again rapidly on the increase, and threatens to become as injurious as ever, unless preventive means are promptly resorted to, such as were before so effective. That smut is infectious, or can be communicated from diseased to pure grain, is a fact as well established as that the itch or small pox may be spread by contact or inoculation; and every measure intended to guard against it, should be based on a knowledge of these facts. Peculiar conditions of the soil, or of the weather, may be more favorable to the action of these injurious causes than others, but no matter what the weather or soil may be, the farmer who sows smutty wheat, without precautionary measures, must not be disappointed at finding it in increased quantities in his next crop. The concurrent testimony of wheat purchasers and millers, that smutty wheat has been gradually on the increase for several years, should put farmers on the alert, and induce a general recurrence to some measures for arresting the evil; and when the evil is one that may be so easily and quickly removed, there can be no excuse for permitting its continuance.

TEMPERATURE OF AUGUST.

August is usually the warmest month of the year, or that in which the average temperature is the highest. July has usually the hottest days, but the average is generally below that of August. To show that the August of the present year has been the warmest month that has occurred in a number of years, we give the average temperature of that month for the last six years. The month that comes the nearest to it, was July, 1841, which only fell 1° short. The average is obtained from observations made at 9 A. M. and 2 P. M., observation having shown that those hours furnish an average better agreeing with the general temperature than any other.

Year.	Average temp. of August.
1838	69°
1839	68¼°
1840	72°
1841	75°
1842	70¼°
1843	77¼°

That the temperature of the present season has been a favorable one for the crops generally, their abundance throughout the country sufficiently testifies. The early part was cooler than usual, which while it was bad for corn, was very favorable for wheat, giving the plant a better time to root previous to its throwing out the seed stem, than that grain generally has in this country. On the contrary the hot weather of part of July, and the month of August, operated favorably on corn, without producing any injurious effect on wheat, as that had so far advanced as to be beyond danger from that cause. This modification of the weather, accounts for the superior quality of the wheat berry, and the greater yield beyond what was anticipated by the farmer generally; and although the corn crop is somewhat late, it promises to be a full medium one, unless in some few districts where drouth operated to its injury. The hot dry weather of August will tell more on the root crops, particularly potatoes, than any other ones; and our farmers generally may expect at the harvesting, "small potatoes and very few of them." The tap rooted cultivated plants are looking finely, and the beets, carrots, &c., promise very well. There have been few years in which the seed wheat has been put in earlier, or the ground in better condition, as a whole, than the present. Indeed there is some reason to apprehend from the quantity of wheat sown in August, and the first days of September, that we may hear some complaints of the fly previous to the next harvest, as the early sown wheat plant will be sufficiently advanced to enable the autumn hatched fly to deposit its egg, and mature the chrysalis previous to frost. The danger from this source, however, is in general not great, as it is only where the fly has prevailed extensively, that two generations of this pest are commonly produced annually; one to deposit its egg in the young wheat plant, in which it remains over the winter; and one produced from these, to renew its attack as soon as the plant commences growing in May or June.

Youth is the spring time of the affections.

Prize Essay.

THE PREPARATION AND USE OF MANURES.

BY WILLIS GAYLORD,
Associate Editor of the Cultivator.

(Continued from page 143.)

USE OF PEAT OR SWAMP MUCK.—According to Mr. Colman, in his Fourth Report, two-thirds of the manure used on the extensive garden and farm of Mr. Cushing, near Boston, is made from meadow muck or peat. The compost, for top dressing meadow and grass lands, is made by taking the muck from the pit in August or September, where it lies to the next year. The compost heap is then made on some convenient place, by spreading a layer of muck eight inches thick; on the muck four inches of ashes; then another layer of muck, and so on for five layers, making a pile five feet high, in the form of a ridge. This lies through the winter, is opened and mixed in the spring, and the next fall is spread on the land. The compost for plowed lands is made of two-thirds muck and one-third manure. Fresh manure, or that which has not fermented, is always used, and care is taken not to put in so much muck as to prevent the compost's heating. The fermentation of the manure decomposes the muck rapidly, and when this is done, the compost is fit for the land. Horse manure or unslacked lime, accelerates the fermentation—colder manure retards it. It is the opinion of Mr. Cushing and his gardener, that muck for mixing with cow dung, or for putting in hog styes, should be dug from the swamp six months before using, as the action of the atmosphere facilitates the change necessary. Muck, without this preparatory fermentation, they consider of little importance as a manure.

POND MUD.

Pond mud, although not as rich in vegetable matter or humus as swamp muck or peat, is still one of the most valuable of fertilizers. The quantity of earthy matters it contains, is rather an advantage than otherwise, when applied to light or sandy soils, and will rarely be found injurious on any. As a manure, the action of pond mud is more immediate than that of unfermented muck, owing to the much greater proportion of salts and silicates it contains. It is astonishing what quantities of this manure are lying worse than useless in the thousands of mill ponds in our country. In the winter of 1839-40, Mr. Whalen of Saratoga co., drew from a pond on the Kayaderosseras creek, 1,000 loads of pond muck, and put it on a field of 17 acres; soil light and sandy, or gravelly, and reduced by *skinning* until it would produce nothing but sorrel and mullein. This field, planted to corn, gave him 850 bushels. The extra product from the use of this manure, he estimated at twenty bushels per acre. In the winter of 1840-41, he took from the same pond 700 loads, and applied it to two other fields, and with similar results. Mr. Whalen has also, at different times, drawn 800 loads of muck from an ash swale, and found it to nearly or quite equal in its effect on vegetation, the pond mud. After the corn, Mr. Whalen has uniformly grown oats; and on these worn out lands, where he formerly would have lost his seed oats, as well as the grass seeds used, he has been successful, both taking well where the mud or muck had been used. For heavy loams or clay, Mr. Whalen is of the opinion that a mixture of lime or yard manure, with the muck or mud, would be indispensable. This mixture, the experience of Mr. Clark of Northampton, and others, shows, is well effected by placing the muck in the cattle yards or pig styes, to be incorporated with the manures by the feet or noses of the animals, and to act as absorbents of the urine and soluble matters that are too frequently lost.

NIGHT SOIL.

Night soil, or the contents of privies, is one of the most powerful and valuable of manures; but prejudices, combined with the difficulties formerly attending its use, have prevented much attention to it in England or the United States, until within a few years. In consequence, a substance of the greatest importance to the farmer has been regarded as a nuisance, and, in the vicinity of large cities, has truly been so. Now, since science has taught the mode of preparing it for use, its use is becoming general, and its value fully appreciated. According to the analysis of manures, made by Boussingault and by Dr. Dana, there is no manure ordinarily accessible to the farmer so rich in the carbonates or salts of ammonia as this. This will be seen by comparing it with horse dung, the value of which is well understood.

	Horse Manure.	Night Soil.
Geine,	27.	23.
Salts,	.96	1.2
Carbonate of ammonia,	3.24	15.32

HOG DUNG.

The dung of the fattening hog approaches night soil in value, more nearly than any other; indeed, Dr. Dana supposes that for all the purposes of analysis, these may be arranged under one head. In practical use, Von Thaer, on the Prussian government farm, determined by experiment its comparative value as follows: If a soil without manure, would yield three bushels of produce for one sown, manured with different substances the result was,

Without manure,	3 for 1 sown.
With cow dung,	7 " 1 "
With horse dung,	10 " 1 "
With night soil,	14 " 1 "

COMPARATIVE VALUE OF NIGHT SOIL.

In some experiments made by Arthur Young, and detailed in the Annals of Agriculture, the effect of this manure on wheat was as follow:

Simple soil, per acre,		12½ bush.
Bushels of night soil,	320	37½ bush.
" "	240	32½ "
" "	160	31½ "
Cubic yards of farm yard compost,	60	25 "
" " " "	30	23½ "
30 do. and 1 cubic yard of chalk,		25 "

Applied to potatoes, the results were not less decisive:

Simple soil produced per acre,	120 bush.
Night soil, 10 wagon loads,	600 "
Bones, 10 "	650 "
Hog dung, 60 one horse cart loads,	480 "
Yard compost, 60 one horse cart loads,	300 "

POUDRETTE.

The most common method of using night soil, or at least that in which it is most portable and least offensive, is to convert it into poudrette. This is done to the best advantage in large manufactories; and hence they are usually established in the vicinity of large cities, where the original article is easily obtained. Different processes are adopted, but the most common is to slowly dry the night soil in pans, having previously mixed it with plaster or ground peat. The object in adding plaster or peat, is to prevent the escape of ammonia, on which the value of the manure is mainly depending. The dried mass is then pulverized—is perfectly inoderous, resembles a dry brownish powder, and may be used broadcast or in drills. In Paris, a powerful manure is made, also called poudrette, by boiling the offals of the slaughter houses into a thick soup, making this into a stiff paste by stirring in coal ashes, then drying and grinding.

URATE.

Urate is a manure formed from a compound of urine, sand and plaster of Paris. In Paris, where the manufacture is most perfect, the gypsum is burnt previous to using. The value of the urates, as a manure, will be better understood from the annexed table.

Water,	65.
Urea,	5.
Bone dust,	5.
Sal ammoniac and muriate of potash,	15.
Sulphate of potash,	6.
Carbonate of potash and ammonia,	5.
	100

From this, it will be seen that urate abounds in those substances most necessary to give fertility to soils. Dr. Dana remarks that a cord of loam, saturated with urine, is equal to a cord of the best rotted dung; and in some experiments made by the French Royal Society of Agriculture, which may be found detailed in the *Dictionnaire d'Agriculture Pratique, Paris*, 1828, for the purpose of comparing it with night soil, pigeon's dung, &c., known to be very effective, the result was in favor of the urate. When mixed with dried night soil or poudrette, its effect on various crops was very great. From the experiments there instituted, it appeared that urate alone acted most favorably in moist seasons. It must be remembered, however, that night soil, when properly prepared, retains all the urine, or rather its fertilizing qualities; and the fact that urine is of itself so valuable a manure, should put farmers on their guard against suffering it to be lost from their stables and yards, as is usually done.

USE OF NIGHT SOIL.

Where the farmer is so situated that no poudrette manufactories are within his reach, he will find that by making it into a compost with swamp muck, ashes, peat or gypsum, he will have a manure that may be easily applied, and which will possess great fertilizing powers. The Chinese have long been celebrated for the extensive use of night soil. Their method is to make it into cakes with a rich marl, which, when dried in the sun, constitute a regular article of traffic, almost a legal tender. The Flemings were the first of the Europeans to make a common use of night soil as a manure, and hence its name of Flemish manure. There it is applied directly, and without preparation, to any crop for which manure is wanted; and the superiority of Flemish agriculture, and the great fertility of their soils, may be, in a great measure, attributed to their careful saving and use of matters which others have been most anxious to be freed from. In Spain, the celebrated asparagus of Saragossa is grown on beds of loose gravel and sand, but a little above the flow of the tide; but these beds are heavily manured, after the cutting of the season is closed, with fresh night soil dug in, and thus their fertility is sustained, and the unrivaled character of the Saragossa asparagus maintained.

BONES.

Bones, ground or crushed, form another powerful manure; and although but little used as yet in this country, there are some indications, such as the erection of mills for crushing them, that their use will soon become extensive, and our farmers be saved the mortifying spectacle, so long witnessed here, of seeing ship loads of bones exported to Europe, used by farmers there, and returned to us in the products of the soil. Col. St. Leger of Wormsworth, was the first to introduce bone manuring into England, in 1775; but it was many years before their value was fully understood; and it was only in connection with the turnep culture, that they came into general use. The manner in which bones act as manures, and their value, will be best seen by a statement of their constituents. The bones of the ox, according to Berzelius, contain in 100 parts:

Cartilage,	33·3
Phosphate of lime,	55·35
Fluate of lime,	3·
Carbonate of lime,	3·85
Phosphate of magnesia,	2·05
Soda, with a little common salt,	2·45
	100·

The analysis of Fourcroy and Vauquelin, gives:

Gelatine and oil,	51·
Phosphate of lime,	37·7
Carbonate of lime,	10·
Phosphate of magnesia,	1·3
	100·

Johnson, in his lately published work on Fertilizers, says: "Dry bones contain about two-thirds their weight of earthy matter, the other third chiefly of animal matter, resembling glue. Of the earthy matter, five-sixths consists of phosphate of lime and magnesia. A ton of bone dust, contains of

Animal matter, about	746 lbs.
Phosphate of lime, &c.	1,245 lbs.
Carbonate of lime, &c.	249 lbs.

Bones, however, vary somewhat in their constituents, some containing more of the earthy, and others more of the animal parts; take those of the calf and the elk for examples, to which the teeth of the horse are added.

	Phospate of lime,	Carbonate of lime.	Animal matter
Calf,	54.		46.
Elk,	90.	1.	9.
Teeth,	85.5	15.5	

USE OF BONES.

It is evident then, that bones abound in matters capable of producing ammonia. Dr. Dana estimates its power in this respect to be equal to 8 or 10 times that of cow dung, while, if the salts are regarded, 100 lbs. of bones contain nearly 66 times as much as the same quantity of cow dung. Experience proves that the power of aiding crops, between dung and bones, is about in the proportion of the constituents named. It is evident that much of the value of bones depend on their cartilage. Boiling bones, as generally practiced, has but little effect in extracting the gelatine; and does not remove even all the fat or oil. Under high pressure, as in Papius's digester, the separation of the animal from the earthy matter is complete. The finer bones can be crushed or grouud, the better or quicker will their influence be felt; and boiling, by removing the exterior cartilage and fat, renders the crushing more perfect. It is owing to this cause, undoubtedly, that many of the English agriculturists prefer dry to fresh bones; as the dust made from the former, is more suitable for sowing or drilling with seeds, than that of the latter. Bone dust is the most efficient on light and dry soils. It has been found also very useful on limestone soils and light loams; but on heavy clay or wet soils, this manure does little or no good. Bone dust is one of the most efficient manures on clover, particularly the white clover; exceeding gypsum in its effects on this plant. This is accounted for by the fact, that white clover abounds in phosphate of lime; and the phosphates of bones supply it in abundance. Although principally employed as a manure for turneps, in consequence of their importance in a rotation of crops for the animals of the farm, particularly sheep, it is considered by many farmers quite as useful, employed as a manure for potatoes, as it is for turneps. Bones are found to be more valuable, if subjected to a partial fermentation before being applied to the crops. If mixed with five or six times their weight of vegetable mold or fine rich earth, and turned over for several times for a few weeks before using, the value is much increased. Since the general use of bones has been introduced into England, vast quantities are gathered and imported from all parts of the world. As an instance of this traffic, it may be mentioned that at Hull alone, in 1815, 8,000 tons of bones were imported; and this amount, at the same place, had increased in 1835, to 27,500 tons.

GUANO.

Guano is another manure of animal origin, which has lately been brought to notice. It is the excrement of sea birds; and the immense masses of it existing on the rocky isles of the Pacific, in the vicinity of Arica in Peru, are the accumulations of centuries. That, in this state, it differs from the newer exerements, can scarcely be questioned, as the action of the atmosphere must have produced many chemical changes during the lapse of years. Analysis shows it to consist chiefly of insoluble and soluble salts, chiefly phosphate of lime and organic matter, or salts 32 parts, and organic matter, 68. A large portion of the organic matter is uric acid and ammonia; and regarded as a manure, it may be considered as a urate of ammonia. It appears as a fine brownish powder, with a strong marine or fishy smell, and gives off ammoniacal fumes when heated. Several ship loads of this manure have been carried to England; and the experiments show, what indeed the analysis would prove, that it is to be classed among the most efficient of manures. It has succeeded well, whether applied to grain, grasses, or to roots. There is no necessity of enlarging on this manure here, as it is not probable that it will ever be introduced to any extent into the United States, while we have so many easily accessible sources of fertility that have as yet hardly been touched, among us. It may be mentioned in this place, that the dung of domestic fowls is one of the most valuable of farm manures, far exceeding in power even that of the hog or horse; and though not equal to guano in ammonia, probably from there not being as much animal food used in its production, still deserving more attention in this respect that it has received.

VARIOUS ANIMAL PRODUCTS.

All animal products, capable of putrefaction or decomposition, can be converted into manures; fish, flesh, gristle, sinews, skin, horns, hair, wool, and indeed all animal solids or fluids are of this character. The man who allows his dead animals to putrify and waste away above ground, is guilty of great improvidence; and converts

what might be made a valuable manure into a decided nuisance. A dead horse, covered with earth or vegetable mold, mixed with a little lime or gypsum, will, when decayed and converted into manure and spread on the soil, add to the value of the wheat or corn grown, not enough perhaps to buy a valuable new one, but not unfrequently more than the worth of the original animal. A more disgusting sight can scarcely be imagined, than to see the fences and trees around a farmer's yard dressed out with dead lambs or other defunct animals in the spring season. All such, should be buried at once, and thus made available in other forms.

FISH.

Of the substances named above, fish is the one most commonly used as a manure. In the vicinity of the sea, large quantities of fish are annually used in enriching the soil. This is particularly the case on Long Island and in Rhode Island. They are sometimes spread broadcast on the earth and plowed in; at other times deposited in the hills of corn; sometimes spread over the meadows after the crop is mowed, and allowed to putrefy in the open air. The stench, where the putrefaction goes on in the open air, is intolerable; and can only be endured by those whose olfactories have been accustomed to the nuisance. This is a most wasteful practice, and should long ago have been abandoned. Treated in this way, but a small part of the actual value of the fish is realized; and it is not to be wondered at, that where the methods of using this manure are so different, widely different ideas of its value should be entertained. Fish should never be used fresh, or thrown at once upon the soil. The true way of preparing them as a manure, is to make them into compost, by placing them in layers with muck, rock weed, peat, or even common loam, to putrefy. Where the soil is heavy or inclining to clay, where the compost is to be used, common shore sand, containing as it does large quantities of particles of carbonate of lime, will be found useful as a composting ingredient with the fish. When the fish are decayed or putrefied, the mass should be dug over, the parts thoroughly mixed, and if much ammonia or offensive gas is liberated, a covering of earth should be given, and the mass be allowed further to ferment before using. In this way, fish never fail of being a valuable manure. Rock weed, eel grass, or in short any of those vegetable or animal matters that abound on the sea shore, may be advantageously used in the preparation of these compos's.

REFUSE OF FACTORIES.

There are many manufactories, particularly those of skins, furs and wool, where large quantities of manures of the most powerful kind are annually suffered to go to waste, though to a much less extent than formerly. The refuse of such establishments, now frequently considered, and justly as now treated, a nuisance, may, by simple application to the soil, or still better by being made into compost, be used as the best of fertilizers. One of the best farmers and most successful breeders of our country was driven into the business of agriculture, in self defence as it were. He was an extensive manufacturer, and the difficulty of disposing of the refuse and waste of the establishment, compelled him to purchase a farm in the vicinity of the city, in enriching which, these matters have been most successfully employed. Those farmers who formerly could not be induced to receive such refuse materials as a gift, would now, after the proof they have seen of their value, be happy to purchase them at a liberal price. The furrier, the tanner, the morocco manufacturer, comb maker, &c. &c. are all dealing in materials of the utmost value, when applied to the soil as manure; and the farmer little understands his true interests, who, living in the vicinity of any of these, does not avail himself of these refuse matters to the utmost extent permitted.

MANURE OF WOOL.

Perhaps there is no substance more rich in matters valuable as manures, than the washings and refuse of woolen factories. Chaptal was one of the first to call attention to this matter, and the instances he gave of their fertilizing power were of the most convincing kind. It is but very lately, however, that any attempts have been made in this country to render the refuse of our factories available. All remember, when around every factory and every clothier's shop in the country, piles of refuse wool, clippings, pickings of cards, and sweepings, accumulated in masses, never thought of as of value, but considered as matter of which the owners would most happily be quit. The method of disposing of them, when they could no longer be tolerated, was to throw them into the river; to apply them to the garden or farm was not once thought of. Not long since, in one of our villages, I noticed a garden, the vegetables of which had a luxuriance forming a striking contrast to others near them, and the cause of the difference was asked. "It is all owing to the refuse of that clothier's and carder's shop," was the reply. "I saw in the Cultivator a notice of the value of such manures, and the owner of the shops gladly availed himself of my offer to remove it at my own expense. I gave my garden a good dressing, and as this is the second year, you may judge of the value of the material as a manure. It is probably the last I shall obtain, however," he added, "as the mill owners, after seeing its effect on my garden, are now as anxious to save this refuse matter as they were before to get rid of it." The oily or sweaty matter on unwashed wool, is a soapy substance having a base of potash, with an excess of oily matter, with slight traces of the carbonate and muriate of potash, all valuable as manures; and as all are easily soluble in water, such water should never be lost. A wool merchant at Montpelier, had his washing house in the midst of a field, the greater part of which he had, by the use of this wash, with which he watered his plants, transformed into a fine garden. The experiments made by Judge Buel and by Mr. Bement, with hog's bristles and horn shavings, were conclusive as to the value of these substances for manures. In short, as all substances of this nature are nearly pure gelatine, with a slight addition of the phosphates of lime, it is evident their decay must furnish an abundant supply of ammonia to plants, and therefore render them valuable as a manure.

LIQUID MANURE.

There is but one other manure of animal origin to which it will be necessary to allude in this place, and that is urine, or as it is commonly called liquid manure. Analysis proves that this is a substance peculiarly rich in materials required by plants, and experience enforces the results of analysis; yet not one farmer in a thousand makes an effort to convert this mine of riches to any account, but the whole is most generally lost to him. Dr. Dana gives the following as the constituents of cattle urine, which may stand as the type of all others, though human urine and that of the horse differ from this in the character and quantity of some of the salts contained in them:

Water,	65.
Urea,	5.
Bone dust,	5.
Sal ammoniac and muriate of potass,	15.
Sulphate of potash,	6.
Carbonate of potash and ammonia,	4.
	100.

VALUE OF URINE.

Compared with cattle dung, it will be seen that while that gives only 2 lbs. of carbonate of ammonia to 100 lbs. of dung, the urine gives 5 lbs. of ammonia in its urea, and nearly three times that amount in the other ammoniacal salts. One-third of urine is composed of salts, whose action on vegetation is of the most energetic and favorable kind; and yet there are thousands who call themselves pretty good farmers, who use all reasonable precaution to preserve the solid parts of their animal manures, that have never made an effort to save that which is of far the greatest value, the liquid part. But it must not be forgotten that soils must contain decayed organic matter or humus for these salts to act upon, otherwise liquid manure or pure urine can do no good. Where the wash of the barnyard and stables is saved, the loss of a large part of the urine is prevented; but when, as is too often the case, this is wholly lost, not only is the urine thrown away, but a large part of the soluble humus of the manure accompanies it. It is an excellent plan, therefore, to have some reservoir for the reception of such liquid matters as would otherwise be lost. If this cannot be done, cover the bottom of your yards with muck, or even common loam, as this will absorb and retain much of the urine and liquid matters of the dung. Experience has demonstrated that a load of loam, saturated with urine, has a more powerful effect on vegetation, than the same quantity of best rotted stable manure. Human urine is richer in salts useful to vegetation than any other, containing, according to Dr. Thompson, in 1,000 parts, 42½ lbs. of salts. The slightest attention on the part of the farmer, might prevent the loss of this; and many a load of swamp muck, or loam mixed with gypsum, might, when saturated with urine, be added to his available manures. Liquid manures, or rather urine, differs much in the salts it contains, according as the food is rich or otherwise. "White turneps give a weaker urine than the Swedish, and green grass is worse than either," according to Dr. Dana. Turner and Liebig found that the urine of fattening animals is richer in salts than that of store animals. Indeed, the law so well known with regard to solids, that the richer the food the more valuable the dung, it is probable holds good in regard to the urine also.

SOOT.

Soot is a valuable manure, peculiarly rich in humus as well as salts, and in its composition more nearly allied to the solid substance of animals, than any thing else. It contains of humus or geine 30.70, of nitrogen 20., and of salts of lime 25.31 parts in 100. It also abounds in salts of soda, potash and ammonia. According to the analysis of Dr. Dana, 100 lbs. of soot contains as many of the valuable salts as a ton of cow dung, and its nitrogen, compared with that manure, is as 40 to 1. The ordinary farmer can make but little use of soot, as it is not to be had in the country in any considerable quantities; but those in the vicinity of cities may avail themselves of this manure with much profit. For the gardener or the floriculturist, soot is an excellent manure; but care must be taken not to use it too freely, as we have known tender garden plants at once destroyed by too liberal applications of it, particularly in a dry state. Mixed with water, in the proportion of six quarts of soot to one hogshead of water, it has been found a most efficacious liquid for watering plants, particularly those grown in green houses.

ASHES.

Ashes, leached or otherwise, are of great value as a fertilizer, especially when used on soils that are sandy or light. Unleached, the potash contained goes to form silicate of potash, and gives the supply of silex necessary for the stems of the grasses or corn; and leached, although the potash is the greater part of it separated, the remaining phosphates of lime and magnesia go far to restoring to the fields on which such ashes are strewn, the necessary matters of which previous cropping has deprived them. 100 parts of the ashes of the wheat grain contain 32 parts of soluble, and 44 parts of insoluble phosphates, in all 76 parts. The value of ashes abounding in the required phosphates, when used on grain lands, may be seen at once, as well as the folly of those farmers who waste or sell the ashes produced in their dwellings.—(*Conclusion in our next.*)

SELECTION OF STOCK, &c.

MESSRS. GAYLORD & TUCKER—For several past I have been a subscriber and constant reader of your truly valuable journal, although but a few years have elapsed since my attention has been turned to that noble occupation, cultivating "mother earth." Now, Messrs. Editors, although this is our first introduction, you may probably think that I am disposed to complain or find fault with every thing. Not so. Still there are some communications that I do in serious candor think ought to be censured. For example—the various breeds of improved cattle, hogs, and sheep. It is impossible for any one to determine the true merits of the various breeds, as I find that "it is all fish that comes to our net." Each breeder or importer is sure to laud his own stock to the skies. Self-interest is so strongly depicted that a stranger or novice can come to no certain conclusion. Now I am building machinery for horse power, and wish to purchase a threshing machine, crusher, cutting box, clover *getting out machine*, corn sheller, &c. I want them all of the most approved kinds. I take up the Cultivator, volume after volume, and read all the various puffs, and am left as much in the dark as though I had not read any thing about them.

A. B. N.

N. B. If you will tell us how to kill bamboo vines and ribbed leaf or French plantain, you will not only "improve our minds," but also our purses.

Three Otters, Bedford co., Va., 1843.

We wish to make one remark in reply to our friend "A. B. N." In the papers which we give from our correspondents, on the various breeds of cattle, the different kinds of agricultural implements, &c. &c., we are not to be understood as expressing any opinion on their actual merits or value. Where personal experience enables us to speak, we do so without hesitation; but we are not to be considered as endorsing the mere opinions expressed by others. There are many excellent breeds of cattle in our country, and that the owners and breeders of these varieties should express opinions favorable to the animals of their choice, is what is to be expected. So with agricultural and farm implements. The maker or improver of what he deems a valuable implement, wishes to bring it to the knowledge of the agricultural public, and it is for their interest he should do so, and for this purpose a communication, or an advertisement in the Cultivator, is found to be the most effectual method. We spread these notices before our thousands of readers in all parts of the U. States, and it is for them to decide whether the animals, or the implements, are, under all the circumstances, the ones best adapted for them. Without the means of comparing their merits by actual test, we can only give descriptions and opinions, and leave those interested to decide whether the animal or the implement, is the one most suitable for his location, the condition of his plantation or farm, or the crops he can grow upon it. The animals which would succeed well in one part of the country, may not in another. Those that grow to a great size, and in a short time, require more and richer food than those that are smaller, and slower in their growth to maturity. The plow, and other implements of the farm, require to be somewhat differently constructed on different soils. What may be expedient in one place may not be so in another. We aim to furnish the facts by which a farmer or planter, exercising his own reason and judgment, may determine and select for himself the most suitable animals and implements—may find himself in a situation to improve both his mind and his soil.

With the bamboo vine we are unacquainted, but should suppose careful cultivation would exterminate it. Our method of destroying the ribbed plantain, is to prevent its going to seed in any case, and carefully digging it wherever it appears; and this method, it should be remembered, will effectually destroy in a short time any weed whatever.

CULTURE OF RUTA BAGA.

WE were furnished last winter, with the following statement relative to the cultivation of a crop of ruta bagas on the farm of GEO. J. PUMPELLY, Esq. near Owego, in the year 1842. The paper was mislaid, or it would have received an earlier insertion. The product was a large one—equal to about 1,375 bushels per acre—and creditable to Mr. McIntosh, who had charge of the farm:

"Land—79-100ths of an acre—sandy loam. Year previous in potatoes—*no manure*. Now thoroughly plowed, harrowed, and ridged, at 2½ feet. Manure well rotted, and placed in the furrow, upon which the ridge was turned— say 20 loads. Seed sown thick—twice the usual quantity,—on 15th to 20th May. 3½ days putting in the crop, with horse, team, and two men.

First hoeing,	3 days, and	2 men.
Second "	2½ "	2 "

Harvesting delayed by an early and hard frost. Turneps topped and clipped, and carried in cart to cellar—none buried.

There were 58 cart loads, weighing upon an average, as tested by actual weight, 1,100 pounds; making at 60 pounds to the bushel, 1,063 bushels."

Where is true happiness but at *home?*

Original Papers from Contributors.

WESTERN FARMING.

To my friend "Richmond"—Your communication in the August No. of the Cultivator, as well as your private letter to me, have both been read with pleasure. Your detailed statement of the advantage of manuring, must certainly be useful to all eastern farmers, and the time will come when the same system will have to be adopted in the west; but at present, it is a mooted point whether manuring our prairie soil will pay the expense. My own opinion is, that for corn and potatoes it will, and for small grain it will not. It is a fact that wheat, oats, rye, &c. grow without manure extremely luxuriant in favorable seasons. In this vicinity, our wheat is extremely likely to winter kill—generally by heaving out; but last winter it was to a very great extent killed in another way, which I will describe. The ground, previous to the January thaw, was but little frozen, and the wheat remained green under the snow, which was melted off, and by a sudden change to severe cold, was formed into a complete coat of ice over the level surface, so as to exclude the air from the wheat, killing entirely thousands of acres, while the roots remained firm in the ground. Where the snow remained on the ground, as it did in hollows and uneven land, or where wheat had been sown among corn and the stalks left standing, the wheat lived and produced one of the finest crops ever raised. Many persons, finding the crop dead in the spring, harrowed in spring wheat without plowing, and thus in all instances where it was sown early, obtained a good yield. It is a common and good practice, to sow wheat among corn in this country. It is also a good practice, and almost the only sure one, to plow the ground in the fall for spring wheat, and harrow it in early in the spring as can be done. The reason of this is, that our spring usually opens late, and the surface of the land is too wet to plow, but the seed can be harrowed in, although in the mud.

The surface of the prairie is composed of the fibres of the grass roots, 6 or 8 inches deep, which when rotted by two or three years cultivation, is so soft and friable, that when wet, it much resembles in consistence, wet leached ashes; being as easily displaced when you set your foot upon it, and of course when dry, unless baked together, as it sometimes is in dry weather, it is very easily plowed. When well cultivated it is exceedingly fertile; but how long it will remain so under the "skinning" system, is a problem yet to be solved. My own opinion is, that we might even now, take some useful lessons from some of the manure making farmers of the east.

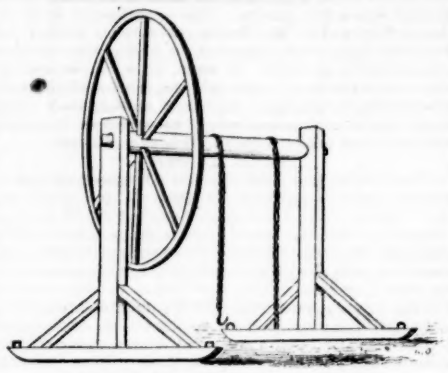
Although we can raise our crops with far less labor and expense than you have shown that you can do, there are but few articles that we can compete with you in your market. The expense of hauling in wagons over a long road, or rather over a long distance void of roads, except such as nature has provided ready made, and the long lake and canal transportation, is a bar to almost all kinds of our produce except wheat. But there is one other product fast coming into fashion here, that we can compete with you, and that is wool: unless our wild and almost insane free trade advocates, shall finally succeed in making this country, as far as all manufactures are concerned, a dependant colony of Great Britain. The prairie region possesses such cheap facilities for wool growing, and the cost of transportation so comparatively small when compared with the value, that you cannot possibly afford to raise wool at the same price, where you manure your land at such an expense as you have stated, or even a tythe of that sum, taking into account an interest of $3 to $6 an acre upon the cost of your land. Here, summer pasturage will cost the attendance of the shepherd and salt used—nothing more—and the winter keeping I can hire done with all proper attention and feed, for 25 cents a head. The great difficulty in the way of western farming, which will continue to increase with the increased productions of grain, will be the cost of transportation to an eastern market; and unless the raising of wool, flax, hemp, silk, and other light articles of value, shall be added to our products, you will grow rich with your expensive manuring system, while we shall barely "hold on," without materially improving our condition or happiness, and undoubtedly our land must deteriorate in fertility. If, and that if is often in the way—if we could ship beef in the late fall or early winter months, we could win your gold for quantity, and golden opinions for quality, for we could well afford to sell the best article for two cents a pound.

Pork can be made to advantage here, but it can be made to much greater advantage farther south, where Indian corn is "the great crop," and grows with such luxuriance as would astonish an eastern man. The Wabash and Erie canal which is now completed, will open an outlet for an immense amount of this article, or the pork grown from it.

If I thought it would be interesting to our mutual readers, I would willingly increase the length of this letter, but my sheet is full, and as in the operations of Tylerism I have lately lost the franking privilege, I must close—for I cannot afford to pay double postage. I hope you will continue the correspondence, until our friend Tucker cries, hold, enough. With sentiments of respect and brotherly kindness to you, and numerous other of my friends and acquaintance made through the columns of the Cultivator, I remain the same

Solon Robinson.

Lake C. H., Ia., Aug. 17, 1843.



STUMP MACHINES.—(Fig. 76.)

Messrs. Gaylord & Tucker—In your excellent paper, I find directions, hints, instruction and information with regard to every subject connected with the scientific practice of agriculture, with one exception, and that no small one for at least the newer portion of our country; and that is the getting rid of stumps. A great part of Vermont, New Hampshire, Maine, the northern part of New-York, and various other sections of the country, are or have been pine plains, where pine stumps are so thick as to render it almost impossible to plow the land, at least with any kind of comfort. In some cases I have counted 200 to the acre. To dig these by hand, is a most laborious and difficult undertaking, and when they are dug, it is no easy task to haul them off, or to burn them, as is sometimes practiced. Besides many roots are necessarily left in the ground to snag the plow, and the poor subsoil is turned up on the surface by the process of digging, leaving (unless afterwards highly manured,) a poor spot wherever there was a stump. Now the object of this communication is to show to your numerous subscribers, an easy, economical and complete way, not only of removing stumps from the land "in toto," but of converting them into excellent fire wood. The accompanying drawing represents a stump machine invented 15 years ago, by two brothers named Manchester, of this place. It is simply the wheel and axle, on a large scale. The uprights should be 11 feet high, 10 by 12 inches square, of hard wood. The sills 7 by 9 inches square, 14 feet long, and turned up at the ends, sled runner fashion, to enable it to slide easily on the ground. Let the posts be firmly morticed into the sills, and well braced. The axle or shaft, should be white oak, ash or maple; 18 inches in diameter, with the gudgeons 8 inches. It should be 20 feet long, and 2 pins should be driven into it, outside the posts, to keep them together. The wheel should be about 18 feet in diameter, with 8 spokes; 4 of which should go through the axle, and the other 4 set as deep as possible into the shaft, without cutting away too much wood, for fear of weakening it. The spokes are to be white oak plank, 8 by 3 inches square. Let the felloes be sawed out of 4 inch plank, and planked by two courses of inch boards on the two sides, in such a manner as to "break joints," (as the phrase is,) with the first set; thus, and at the same time, to form a groove to keep the rope from slipping off. Then get two strong chains made of 1¼ inch iron, and 12 feet long each. Fasten one end of each by a strong staple to the axle, and on the other end of one have a hook, on the other a large link or ring. Then fasten one end of a 1¼ inch rope on the wheel, give it two or three turns around it, and your machine is complete. Now bring your two yoke of cattle, and one assistant; hitch them to the staples, (which should be in each end of each sill,) and drive where you like. Dig a hole under the main root of the stump, (on one side if possible,) and pass your chain under it. Hitch your cattle to the end of the rope, and they will draw any stump that ever grew in the ground. Then take off the dirt from the stump with a spade, and it will fall back exactly as it came up, leaving no hole to fill. There will also be no roots left in the ground for future botheration, and the soil which was about the stumps having never been tilled, will be distinguished as good spots instead of bad ones.

Now have an augur made, such as pump borers use *first*, only about four feet long, having a screw like a cork screw at the point. Bore a hole down exactly in the heart of each stump, (for however rotten at the top, they will generally be sound at the junction or knotting together of the roots,) and put down about 3 inches of coarse blasting powder. This will blow the stump to atoms; and you may then convert them by means of your beetle, wedges and axe, into first rate wood for home consumption. Many farmers will not understand blasting, but it is, after a little practice, as safe and simple an operation as any other on the farm. You will want a crowbar, a priming wire of the same length as the auger, a 4 lb. hammer with a handle 5 inches long, and some match paper made into strips 3 inches long and half an inch wide. After your hole is bored, (and be careful not to have it go clear through by a foot or so,) put down your powder. Then put in your wire, which should be made tapering, the small end about one-fourth of an inch in diameter, on one side of the hole. Now fill the hole with pounded brick and damp clay alternately, pounding it down with the small end of the crowbar, and starting the wire every now and then, till it is full. Now draw the wire by putting the small end of the crow bar through the loop in the wire, and striking it up with the hammer, taking great care not to let the least particle of dust fall into the hole. Then fill the hole slowly with powder, apply your match paper, (common wrapping paper steeped in a solution of saltpetre,) touch fire to the end of the match, and take to your heels; and depend upon it, the stump's powers of locomotion will be vastly assisted by this operation. The machine for drawing them will be cumbrous and heavy, but it will be strong, simple and effective. The whole cost of this apparatus will be between 50 and 100 dollars; but it is well worth while for every large farmer, or 3 or 4 small farmers in company, to possess one, wherever stumps occupy the ground. It is enough to say that the machine made and tended by the inventor, has been in constant requisition since that time, (15 years,) and never went at a stump which it did not take up.

I hope this article will not prove too lengthy for your columns, as it is a subject of great importance to hundreds, nay thousands of farmers in New England; for a pine stump is noted for its ugliness, durability, and dogged resolution to throw every obstacle in the way of tilling the ground, and to maintain its position whether or no, till, nolens volens, it has to give up to some such power as this. H. T. C.

Burlington, Vt., Aug. 14, 1843.

PREPARATION OF SEED CORN.

Messrs. Gaylord & Tucker—I observe in the August No. of the Cultivator, a communication over the signature of "H. W. S. C." in which he states that he had been unfortunate in loosing the first planting of his corn, and imputes the failure to the tar used to protect it from birds, &c. Now, Messrs. Editors, I have been in the practice of preparing my seed corn in the same manner he describes, and never had any fail of vegetating until the present year.

On the 19th of May last, I soaked my corn in warm water for twelve hours, with the intention of planting it the next day, but owing to unforeseen occurrences I did not plant it until the 22d. The usual quantity of tar was put into water sufficiently hot to dissolve the water or soften the tar, when the corn was put in and stirred until well covered with tar. It was then rolled with slaked lime and immediately planted.

After waiting sufficient time, I examined and found it had mostly all rotted; many of the kernels were pierced with from two to three wire worms, and only here and there one sprouted. As I was satisfied it would prove a failure, I caused the ground to be thoroughly harrowed and marked out again. Having used all my seed corn, I obtained a variety of eight rowed white corn, which had been cultivated on the Helderberg. It is said to be early and of quick growth, and having been grown at an elevation of some hundred feet above my farm rendered it an object for an experiment.

I soaked it in warm water for twenty-four hours, then dissolved a sufficient quantity of tar in hot water, put in the corn, stirring it until well coated with tar; drained off the water, rolled it in lime and planted again on the first day of June. On the eighth day it made its appearance, and I think I have never seen corn come up better, which convinces me that it was not the tar that caused a failure of the first planting, but was in consequence of the state of the soil, being deficient of heat and moisture. About the time the plants made their appearance, we had warm lowery weather and seasonable showers, which gave a start to vegetation, and I have no recollection of ever noticing so rapid a growth. In sixty days from the time it was planted, it was in flower and the ears set. It is now as forward as corn generally is at this season of the year, when planted at the usual time, from the 15th to the 20th of May, and should the weather be favorable in September, I anticipate a bountiful crop. C. N. Bement.

Three Hills Farm, Aug. 1843.

EXPERIMENT WITH COAL DUST.

Messrs. Gaylord & Tucker—I have made three experiments with coal dust. I will give you the result of one of them. I had an acre of wheat, measured early in January last, on which I put at least 500 bushels of coal dust. In selecting the acre, I took a part of the field that has had no manure for many years. I also took coal dust that was made many years ago, and which, if it retained ammonia, &c. must have been fully impregnated. My object in measuring the land, was to ascertain the increased product produced by the coal dust, and by that means discover whether it would pay the expense of transportation and spreading on the land.

On Saturday, I finished threshing the field containing about seventy acres. A part of the field had been manured three years ago, and another part was manured last winter by top dressing, all of which was free of rust; all the balance of the field was rusted, and I am sorry to say that the acre which had the coal dust, as much so as any part of the field. As to increased product, there was none. The field is now in clover, and I shall hereafter discover whether that acre produces better than the adjoining lands.

I shall still proceed to try more experiments, and may probably write again on the subject. If coal dust should prove to be a valuable manure, to me it would be all-important; for my iron establishments produce it in large quantities, and I should be at no expense but cartage.

Yours, Wm. Weaver.

Buffalo Forge, Rockbridge co., Va., July 24, 1843.

PRODUCTIVE FARMING.

FLOREAT Agricultura—May agriculture flourish. This wish, this desire cannot be amiss at the present time, when cultivators of the soil cannot find a market for their produce at remunerating prices. Agriculture accordingly languishes, and farmers feel discouraged. But there is no need of despair, for the land produces in abundance, and there is a fairer prospect ahead.

These reflections occurred on receiving from a friend and reading a small 8 vo. of 150 pages, published in New-York, by D. Appleton & Co., 200 Broadway, entitled "PRODUCTIVE FARMING." The author, JOSEPH A. SMITH, informs us that it is a compilation, or "*a familiar digest of the recent discoveries of Liebig, Johnston, Davy, and other celebrated writers on vegetable chemistry.*"—This compilation is an abstract or compendium of the principles laid down by these distinguished agricultural writers, so that the farmer may read in a short time, and at a cheap rate, this small work on "Productive Farming," without the necessity of wading through the larger and more detailed works, from which the author professes to have compiled. This work, though useful, will not supersede the original works of Liebig and others, where farmers are able and willing to purchase them; but "Productive Farming," is adapted to the wants of those who have little money to spare, and less time to read; as the work contains, multum in parvo, or a condensation of several larger works. It is accordingly recommended to all who desire to see agriculture flourish and improve. Book farmers, and practical farmers, those who cultivate large or small farms, may find something useful in the study of this little book.

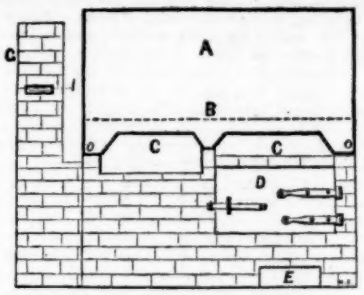
We are glad to see the Appletons, Wiley & Putnam, and other publishers in the book trade, taking hold of works on agriculture. This subject of late is exciting more interest in the community, and farmers are not only turning the soil, but turning the leaves of books, studying the science of the art they cultivate, and becoming better acquainted with the nature of soils, the use and preparation of manures, and the rotation of crops.

There has heretofore been too much apathy among the owners and cultivators of the soil, in regard to the study of agriculture, owing in a great measure to the facility of obtaining new lands at low prices. Hence farms would be cultivated and worn out, and the occupants emigrate to the *west*, where the virgin soil would for a time reward their labors with abundance, without much care or exertion. But good lands will wear out, and by repeated cropping become poor and barren, if no means be employed to renovate them. Such has been the case with many a farm, and the occupants who emigrated from the Atlantic states, have repeatedly pulled up stakes and gone farther west. This process is still going on, and will continue over the wide expanse of the United States. But those who till the land in the old thirteen States, in order to compete with their countrymen beyond the Alleghanies and the *Far West*, must read and study as well as labor. The science of agriculture is replete with instruction, and though agricultural writers may occasionally indulge in unsatisfatory theories, yet among the later authors we find much practical good sense and desirable information.

"Chemistry has rendered many and great services to agriculture, and can render more; the two sciences ought not to be considered as having no relation to each other; on the contrary, practical farming is only conducted on *rational principles* when directed by chemical science. Hitherto it has fallen in with the humor or bias of only a few scientific men to enter upon such inquiries. Sir Humphrey Davy, the greatest chemist of his age, devoted his efforts not only laboriously, but most usefully, to the prosecution of agricultural chemistry; and the recent views and discoveries of Liebig, will do much to economise agricultural operations, as well as to direct the farmer to the easiest and shortest modes of doubling his crops. But generally the appreciation of such efforts, on the part of learned men, has been so small—the reception of scientific results and suggestions by the farming tenantry, so ungracious, that little wonder can exist, that so many have quitted the field in disgust—that the majority of able chemists should studiously avoid it. Hence it has happened that in England, the analysis of soils has rarely been undertaken, except as a matter of professional business."—Productive Farming, p. 144.

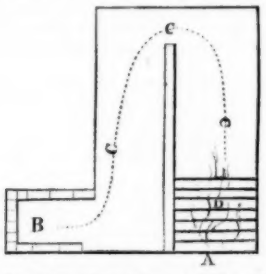
This state of things is undergoing a gradual change for the better in this country and Europe. Our author informs us, p. 145, "that early in the present year, a meeting of landed gentry and farmers took place in Edinburgh, for the express purpose of forming an association *for the application of Chemistry to agriculture*; a tolerably expressive indication of the state of public feeling in Scotland, and one that we trust will be followed up by the organization of kindred institutions throughout the entire kingdom. The great and leading object of the association is to have a chemist of first rate eminence, resident in Edinburgh, who during the winter months, shall devote himself to analysing such soils, manures, and other substances as may be sent him by farmers, and giving them advice regarding their value and usefulness. In summer, he will visit different districts of country, at the request of members of the association, and give a few lectures in the towns, or advice to individuals, regarding the system of management best adapted to different soils. It is easy to see that all this will be attended with very great practical benefits to the country."

In conclusion, we again recommend this little work on "Productive Farming," to the consideration of the agricultural community. RICHMOND.



MR. FERRE'S ROOT STEAMER.—(Fig. 77.)

MESSRS. GAYLORD & TUCKER—As the season for making pork is at hand, and as it is allowed by all judicious feeders, from numerous experiments, that cooking food for fattening swine, is not only the most economical, but also the most expeditious method, I feel in duty bound to lay before the numerous readers of your valuable paper, the plan of a steaming apparatus which I have used the year past to my entire satisfaction. For simplicity of operation, economy in fuel, cheapness of construction, and (I believe,) durability, I have never seen any thing preferable to it. I have substituted a cast iron bottom of a peculiar form, and setting the same in the arch, for the sheet iron bottom to a box, described in a back volume of the Cultivator. I have endeavored by some rough vague marking, (as the draftsman would call it,) to give some idea of the form of the bottom and manner of setting the same. An end view is given; the concave at the end omitted, that its shape may be more readily seen. A. end view of steam box—B. false bottom inside the box, having numerous half inch holes, on which the vegetables to be steamed rest—C. C. underside bottom—D. fire door—E. ash vault—G. chimney—I. damper—O. O. a flange or raised edge around the upper side of the bottom, of a suitable thickness to fill the groove of a common grooving plow. The under edge of the box is grooved and driven on to the raised edge about three-fourths of an inch. The bottom of the one I have in use, is about 4 feet long by 2½ feet wide, and is calculated to steam from 8 to 10 bushels with despatch; it weighs about 110 lbs., but they may be cast of any weight and size, to work 20, 30, or 50 bushels.



Surface view of the bottom.—(Fig. 78.)

This figure shows the course of the fire from the arch on the right hand, to the chimney at the same end of the arch on the left hand side.—A. fire door—B. chimney—C. course of the fire to the chimney—D. grates.

The arch on the right hand side at the grates, is one foot wide, and about the same in height; on the left hand side, next the chimney, 9 inches wide, and the depth of a brick set edgewise, as shown in fig. 77. By this, it may be seen that the fire operates on the bottom between 7 and 8 feet in length, by which (if the damper is properly set,) we save nearly all the heat. A tube is inserted at one corner of the bottom to draw off the water, which to steam 8 bushels, requires about 9 gallons, or one inch deep on the bottom, at the commencement; a small tube or cock in the side of the box, will show at any time, if the water should become exhausted.

The expense of erecting the one I have in use, labor and materials, did not exceed ten dollars. The bottoms cast to order of any size, may be had of Mr. L. Trask, at the south end of Springfield, Mass., near the U. States water shops, who has had some experience in casting the same. For heating water for washing, scalding hogs, or any other purpose, it is very valuable and saves much fuel. Now if my friend in a good cause, Solon Robinson, would adopt the cast iron bottom for his railway steamer, he would have a durable and valuable apparatus I think, and no mistake. As there is no patent, I hope some of our agricultural friends may be benefitted by the improvement.

The drouth has been very severe for some weeks past, but latterly we have had fine rains. Wheat and rye good, oats middling. Hay crop short of last season; late potatoes promise a fair crop. I would recommend planting field beans as a substitute for summer fallow, on light land, for a crop of rye; as I have nearly doubled my crop for three successive years, by taking a crop of beans, and using three pecks of plaster on the beans per acre.

Yours, JONA. E. FERRE.

Agawam, Hampden co., Mass., Aug. 16, 1843.

Provoke not, nor be easily provoked—forgive that ye may be easily forgiven.

CLIMATE AND PRODUCTIONS OF THE SOUTH.

MESSRS. GAYLORD & TUCKER—In the Southwestern Farmer of the 4th inst., a paper published at Raymond, in this state, I find, under the head of "Gross Slanders," a short review of a piece from the Farmer's Encyclopedia, on "Effects of climate of the South." I have not seen the Encyclopedia, but presume the S. W. Farmer has given correct extracts; if he has, the writer is unacquainted with the productions of the south, or designedly gives incorrect information. As your paper circulates far and wide, north and south, east and west, I have concluded to give you *facts*, founded on my *own knowledge*, in relation to the productions as well as health of this part of the south, which is situated between 33 and 34 degrees of north latitude, and like the state generally, is *hilly* and broken. I know an opinion prevails that this state is a perfect level flat morass; the reverse is the fact. This opinion is formed from the accounts of steamboat travelers, who judge the *whole* state by the Mississippi river swamps. Even on the river, hills, high peaked and lofty, may be seen, as at Vicksburg, Natchez, &c. I will take a few extracts from the publication first. The writer says:

"Beets, carrots, parsneps, turneps, radishes, and *other roots*, are equally affected by a hot sun, and scarcely worth cultivating to the far south. They all fructify before they have formed perfect roots, and make foliage at the expense of their bulbs: hence they will always be articles of commerce; the *South will have to depend on the North for them.*"

The largest and finest beets, turneps, sweet potatoes, and yams, I have ever seen, are raised in this section of the country in great abundance—beets of the mangel wurtzel kind, weighing from 25 to 30 lbs.; the common red beet measuring from 12 to 15 inches round. I have just stepped into my garden and measured one upwards of 12 inches, and I have seen and raised many *much* larger. Turneps are raised as heavy as the mangel wurtzel. Yams from 18 to 20 inches round, and from 15 to 18 inches long. Irish potatoes as fine and large as *any* I have ever seen from the north. It is thought best to procure the northern potatoe for seed every three or four years, though many think it not necessary. I have never seen any kind of vegetable for table use, come to greater perfection than they do here, (with the exception probably of celery,)—tomatoes, squashes, cornblins, cucumbers, cabbage, peas of all kinds, beans, &c. &c., all and every one as finely flavored, grow as large, and come to perfection in every respect, as well or better than farther north.

In speaking of fruits, &c. he says:

"It is in Pennsylvania, Virginia, Maryland, Jersey, and the north of Europe, that we enjoy them, although originally they came from places near the tropics. The peach of the Carolinas is full of larvæ, gum and knots, and too stringy and forced to be juicy and flavored."

Now, Messrs. Editors, I was raised in Middle Virginia, in the county of Amelia, about 40 miles southwest of Richmond; lived there until I was upwards of fifty-two years of age; have seen, tasted and enjoyed the fruits of Virginia from my boyhood to old age; and whilst I have the very strongest attachment for the Old State, (God bless her,) and for every thing relating to it, and strong partialities too, truth compels me to say that the peach of this part of the south, (which is in the same degree of latitude as about the middle of South Carolina,) is far, very far superior to the peach of Virginia. "The southern peach full of knots, and stringy and not juicy!" Why, Messrs. Editors, a strange "coincidence" happened whilst reading the piece in the S. W. Farmer; just as I came to that part speaking of peaches, my brother's wife handed me a waiter full; they looked so enticing I put the paper by, and was obliged to spread my handkerchief in my lap to prevent the juice dropping on the floor whilst peeling them; the best peaches when fully ripe, are nearly as juicy as an orange; this year, owing to the cold backward spring, the fruit is not as large as usual, but I picked from the same waiter one and measured it. It measured eight and a half inches round. I have seen many larger.

Again he says:—"The changeableness of the weather at the south in the spring season, throws plants off their guard; the frosts attendant on these changes destroy the young fruit, and it is only one year in three the crop hits at all." This *is not so.* I have resided where I do for upwards of four years, and have never known the peach crop fail; true, we have fewer this year than usual, but plenty to eat, preserve and dry. The peach will bear in three years from planting the stone, if well cultivated. I brought from Virginia, peach stones, and planted them in the spring of '39. Last year, '42, they bore a few fine plump juicy peaches.

Again, in speaking of melons, he says:—"The forcing sun hurries them on to maturity before they have attained much size, or acquired that rich saccharine and aromatic flavor for which they are so much esteemed. The Cantelope melon will rot or have its sides baked by a hot sun, before it is fully formed; and the watermelon is always woody, dry, and devoid of its peculiar sweetness and richness at the south. Vines have been known to run a hundred feet and bear no melons. It is in Philadelphia and its neighborhood," &c. &c. The melons of the south are larger—(have been known to weigh 50 lbs., often upwards of 30 lbs.)—are as juicy and as finely flavored as I have ever seen any where—are raised with more ease and greater abundance than farther north. If you, Messrs. Editors, were here now to partake of some

of the fine, long, juicy, red meat, ice rind watermelons, and the delicious finely flavored juicy musk melon, of the nutmeg and pine apple kind, from seed from Old Virginia, I know you would give evidence strongly for the south, and declare, as well you might, you never saw the like at the north.

Erroneous opinions prevail at the north in relation to the health of the south, to as great or probably greater extent than on any other subject. On the Mississippi and other *river swamps*, the people are not healthy, though those who reside there are not willing to acknowledge it, but the truth is they are subject to ague, and billious, and sometimes congestive fever; and during three or four months of the summer and fall, I would be unwilling to risk my health in such situations; but even there, as the country is cleared up and drained, they will be more healthy. Those residing on the Mississippi river for 100 or 200 miles above New Orleans, are said to be healthy; I do not know the fact of my own knowledge, but I *do know* that those living off the river bottoms enjoy generally good health.

I know of no better way of giving a correct idea of this part of the country, than to give an account of my own place and family, which I believe is a fair specimen of the general health of the country. My plantation is situated on a tolerably large creek, (Perry's,) running from N. to S. through it, for upwards of a mile and a half; the houses situated in a grove of 12 to 15 acres, about half a mile from the creek, west. West and south west of the creek, high hills or mountains running for about two miles; the land is cleared from the creek to those hills, which is about three-fourths of a mile. From the hills to the creek, with the exception of the grove about the houses, the land is in cultivation, (about 600 acres or over.) In the year 1835, this place was settled by my brother and myself, with our negroes and a manager; but I did not move from Virginia with my family, until the fall of '38, when I took charge of the plantation myself. My white family number from six to eight, and one or two years, including my overseer's family, as high as 15 or 16. My negroes between 70 and 80. Up to this time, there has been no death in my white family, and but three cases of serious sickness; only three deaths from *disease* amongst my negroes, from the year 1835, one adult and two children, (one of the children was diseased before it moved here;) and two young babies have died from the carelessness of their mothers smothering them during the night. During the months of July and August, there are occasionally billious attacks among the negroes, though they generally yield to medicine in a few days. I consider this climate decidedly *more healthy for negroes* than Virginia, and more healthy for whites from 1st October to June, as we have no winter fevers; but from the middle of June to October, more subject to bilious fever than Virginia, above tide water; but during those months nothing like as sickly as Virginia, *below tide water*. Those who are much exposed to the sun and dews here, are more apt to be attacked than those who are not. The ladies, I consider healthy all the year round. The people are generally rosy and robust, and beyond all doubt the most prolific country I have ever seen. If those who travel to the south, would quit the rivers and stage roads and come amongst us, and visit us *at our homes* on our plantations, and see our hills as well as our valleys, and become *acquainted with us, our fruits and productions of all kinds*,—lay aside all prejudice, *we war our fruits* would be slandered. But a prejudiced, one-sided fellow from Europe or the North, takes stages and steamboats—rattles and steams through the country—judges of the people from the loafers at the little towns—the country from the river swamps, and returns perfectly satisfied that he entertained correct opinions of us and our country when he started—publishes his "Notes," &c. and proves to all who know no better, that "corn will grow thirty feet high and bear no ears,"—"vines run 100 feet and bear no melons," and what they may bear "dry and tasteless,"—peach trees bear only once in three years, and then the fruit is "knotty and dry," and many other things equally as absurd and false.

I fear, Messrs. Editors, I have run out the *fruits* of my labor much longer than you are willing to read, much more to print. Yet I cannot conclude without saying something of our crops. In this county, the cotton crop *now* is very fine, but in danger from running too much to *weed;* a wet September, the crop will be ruined—dry from this to 1st of October, the crop will be fine. Corn crops tolerably good; new crop offering for 25 cents per bushel. The cotton crop in the lower part of this state, and in part of Louisiana, said not to be good, though I do not know it of my own knowledge.

J. T. Leigh.

Yelabusha co., Miss., Aug. 12, 1843.

DEBT THE FARMER'S MASTER.

Messrs. Gaylord & Tucker—I have been favorably situated the last 15 years, to see and know much of the ways and doings of the farmers and planters around me, and am well convinced they are a class that flatter themselves much, dull students in the study and practice of economy, fast and liberal buyers on credit, but slow payers. There are honorable exceptions to this rule, whose cash or punctuality, makes the trader his obsequious and humble servant.) The farmer sows his seed, plans, pitches his crop, makes his calculation in his favorite rule, multiplication, (not having cyphered as far as subtraction;) being all fixed off, he goes to the merchant, calls for and buys upon the hopes of his ungerminated seed, to be paid for at harvesting; the price he frequently objects to, but it rarely prevents his purchasing. The trader thinking in the meanwhile, of insects, flies, worms, two and four footed varmints, mildew, rust and bad weather; his figures too work in subtraction, adds another enemy in the shape of a long profit, to the number.

If we examine the business of unlimited credit and large percentage, how often or invariably do we find the ruinous effects to both, but more extensively to the farmer; and then for "foreclosing." What a sad tale to be told of a class that should be the most happy, most independent of all others; and yet how is it with us now? no better than in years gone by; 1 in 50 may pay as they purchase; 1 in 100 hardly punctual to the day, or 1 in 500 holding nothing but their own, and paying down as they receive. Farmers generally toil and labor more incessantly than other people, if not as hard as negroes and colliers, yet more diligently, with often no success at all.

You may rely on it, farmers, and see to it, that this buying on time is not to your interest, should you not have to pay interest. Did you ever see how the cash exhibited by a buyer, controls the seller, and how cheap he works, comes down in his price, and so very polite withal. Then be convinced it is for the good of both to exchange cash for goods, and save the expense of paying the merchant for a day book and ledger, and being your book keeper; he will not foot up your account for nothing, but ask and demand his price. D. G. Weems.

Tracey's Landing, Md., 1843.

BEES AND BEE-HIVES.

Editors of the Cultivator—The communication on the subject of bee-hives in your August number, signed "N. of Worthington," is, I think, calculated to convey to your readers a wrong impression, where he says "it can be used gratis," (meaning, if I understand him,) without infringing on any patent right. If he is a reader of the Cultivator, he may not have forgotten a hive called the Perfect Hive, figured and described in your May number, having precisely such a bottom board as his, and on which a patent has been obtained.* He also says he has had in use the Vermont hive. Now he knows, or should know, that Mr. Weeks obtained a patent on a suspended bottom board of whatever form constructed, (and on his "gratis" hive the bottom is suspended.) Perhaps some of the many patentees might wish to say a word about this "gratis" hive; and now one word as to my own experience. The first improved hive I used was the Charlieshope, and at that time it was quite an improvement on the old box. There were, however, objections, such as the expense of making and suspending it; but the greatest was, connecting the bottom board to the body by a common door butt, thus forming across the backside, a joint where worms would always find a hiding place.

When the Vermont hive was introduced by Mr. Weeks, with the suspended bottom, I purchased the right to use, and was much pleased with it on trial, so far as the worms were concerned; but still the expense of constructing and suspending remained the same as in the Charlieshope.

I have also used Webb's patent, but have never found any to equal the Perfect Hive mentioned above and described in the Cultivator as above. The form is simple, the cost trifling, which is quite an item; and being in form similar to the old box hive, will stand where you choose to place it, (saving the expense of stands on which to hang it;) and as the body is raised half an inch above the bottom by means of the hinges attached to it, the bees protect themselves from the worms without difficulty.

Supposing your readers, like myself, are pleased with facts stated, instead of theory, I will venture to give you a short history of one of my swarms of bees this season. To all appearance they wintered as well as the others; but when the working season came they remained idle; no bees or very few were seen, and those few that did venture out, returned in most cases without anything. The hive in which they were, was so constructed with glass, that I could expose to view almost the entire front and side. The bees remained in this inactive state until the middle of July. So few were going and returning, no one without watching the hive, would have suspected there was a swarm in it. The comb was so constructed in the hive, that on opening the front, the cells were exposed to view from top to bottom, which was near 20 inches. Early in the spring, the cells in this sheet of comb were empty, and thus they remained until within a short time, without having deposited in them a single egg or particle of honey. No bees were seen on the front comb, but on opening the side of the hive, a very fair number could be seen in the back part, where they remained stationary. I concluded that as they would not work in the season of honey, neither would they eat after that season was passed. However, the difficulty in the case was what I was searching for; and after repeated examinations I could discover no drones in the hive, and concluded I would introduce some—though I was told the bees would destroy them as fast as I put them in. I took from another hive, say 25, put them in through a ventilator near the top. I could not on that or any subsequent day, discover any dead drones under or around the hive, and I presume they did not kill them. And now the result, you will say. Not ten days were gone before there was a marked change in the hive for the better; the bees were beginning to be more active, and it has gone on increasing from day to day until now, five weeks from that time, the swarm appears perhaps as well as any I have. The empty comb is fast filling with honey, and I have now no fears but it will be full for winter and prove a good strong healthy swarm. Yours,

Nashua, N. H., 8 mo. 21, 1843. N. of Nashua.

*It is due to "N. of Worthington," to say that his communication was received in February last. Of course it was written long before he could have seen the description of the "Perfect Bee-Hive," published in May.—Eds.

APPLICATION OF MANURE.

The writer of the following paper informs us in a note, that it was written for the Cultivator immediately after the appearance of Mr. Garnett's paper on manures, to which it refers, (for this paper, see vol. VI, page 104,) but was mislaid and forgotten, until he saw the request of Mr. Armstrong in relation to this subject, in a late no. of the Cultivator. After some just remarks on the necessity of greater precision and accuracy in statements intended for the public, and acknowledging the pleasure and instruction he had derived from the writings of Mr. Garnett, he proceeds to the article of Mr. G. to which allusion has been made.

"The object of the communication is to prove that the *surface application* of manures is the best. To prove this the writer states the following experiment:

"I began penning my cattle late in the spring, and continued it until frost, in pens of the same size, moved at regular intervals of time, and containing the same number of cattle during the whole period. These pens were alternately plowed and left unplowed, until the following spring, when all were planted in corn, immediately followed by wheat. The superiority of both crops on all the pens which had remained unplowed for so many months, after the cattle had manured them, was just as distinctly marked as if the dividing fences had remained standing." From this, Mr. G. infers that it is "*best to apply manure on the surface of the land.*" If the experiment proves any thing to my mind, it proves quite the reverse of the above inference.

In the early part of his communication, Mr. G. says: "Some thirty-five or forty years ago, I had adopted, but without examination, the notion then most common amongst us, that it was best to let all putrescent manures be well rotted first, and next to bury them deep, either by the plow, spade or hoe." This notion, however, with him, and some of his neighbors, has happily become exploded. Permit me to ask, if suffering manure to lie exposed to the alternate sunshine and rain of a long summer, and through the following winter, is not a pretty effectual method of bringing it into a state that may with propriety be termed "*well rotted;*" and in this condition, Mr. G. caused it to "be buried by the plow." But it may be replied that the fertilizing qualities of the manure thus exposed, had been absorbed by the surface of the earth. This, however, with the manure "well rotted," by Mr. G.'s process, was placed at the bottom, that is, "*buried;*" so that take it in what light you please, it appears to me that the experiment as clearly proves that "burying by the plow," "well rotted manure," is the best mode of producing a crop, as it does that the surface application is "the best."

Again,—let us look at the other part of Mr. G.'s experiment, which he thinks proves that "burying manure," is not useful. This too, I contend, proves, if any thing, the reverse of what he claims. The pens which were first plowed, were, I presume, plowed again when he put his seed in, though he does not say so; and theren is *inaccurate* in his detail. I take it for granted, however, that he did plow the second time; if so, did he not bury his manure in a fresh state, and suffer it to remain there until it had become "well rotted," and then by the second plowing to receive the seed, turn it, together with that part of the earth most liable to become fertilized by the decomposition of the manure, up to the surface, to receive the seed? If he did not plow the second time, that may sufficiently account for his not getting as good a crop as he did upon those parts plowed when the seed was put in.

Understanding however, that all the fields were plowed together at the time of planting, is it not apparent from the experiment, that in those "pens" in which Mr. G. supposed he applied the manure to the surface, he actually "buried" it—and in those where he supposed he "buried" it, was in fact, at the time of planting on the surface?

In what I have said, I do not mean to intimate an opinion for or against the surface application of manure. I am not a farmer of sufficient experience and reading, to give an opinion upon such a subject. I merely wished to show the grounds upon which I complained that the experiment was to my mind unsatisfactory.

Before closing my letter, already too long, permit me to allude to one of Mr. G.'s proofs that the "gas," or that portion of manure taken from it by the process of evaporation, is not lost, but is "immediately given by the atmosphere to the tops of plants, as more suitable to them than to the roots."

He says that on taking the bark off from the bodies of certain young trees, in a ring about three inches wide, to his surprise, during the first year or two, the part of the body above the ring, became obviously larger than the part below, and that this difference increased every year afterwards.

I make no great pretensions to a knowledge of physiology, either animal or vegetable, but I had always understood that the sap, or that fluid of a plant from which it derives its chief nutriment, circulated in a manner corresponding in some measure to the circulation of the blood in the animal system. That it passed up from the root, being derived from the earth, through that entire

part of the woody substance of the plant, called commonly the "sap part," and which answers to the arteries of the animal system, and returns through the bark, which answers to the veins. Now if the bark is separated, or a "ring" of it taken off, the sap will pass up, but is prevented from returning; that is, an unnatural quantity of that fluid from which the tree derives its support, is retained in the branch above the ring—the effect of which is to swell it to an unnatural size—an experiment, by the way, very injurious in the end to the tree.

A YANKEE FARMER.

SIXTEEN QUERIES ANSWERED.

MESSRS. EDITORS—I know that you are often troubled with queries propounded to you, which you deem entirely useless; yet, as the chief value of an agricultural paper consists in its affording a medium by which we can suggest our difficulties, and by which we can have them resolved, I beg that you will arm yourselves with all your patience, and that you will answer the following questions for me, or have them answered by some of your correspondents:

1. It has been stated that if the blossom on one kind of fruit tree be not impregnated by the pollen from another kind, the seed from that tree will all produce trees bearing the same kind of fruit. Does not this rebut the theory of botanists, that all kinds of the apple originated from the crab? There must have been a time when there was no kind of apple but the crab, and if it require the intermixture of two kinds to effect a variety, how could another kind originate from the crab alone?

2. What is the best and simplest mode of making rat proof meat houses?

3. Can sap wood be rendered durable by being coated with pitch; and if so, how should it be applied?

4. Can potatoes be kept without sprouting in the spring, until the new crop is ready for the table?

5. I have some carrots from seed sown this spring, now going to seed. What is the reason?

6. Asparagus being a vegetable whose roots do not penetrate deeply, would it not be better to plant it shallow instead of trenching for it?

7. Can sheep be folded without injury to them, in the summer? If they can, it would afford a fine supply of manure?

8. Which is the best kind of grass for yards and garden walks? When, how, and in what quantities should it be sown, and how should the soil be treated where that pest the white clover has shown itself? Will not ashes and plaster, which stimulate the grass sown on the yard and garden walks, equally stimulate the white clover?

9. My turkies never having laid eggs enough to set them with, can they be made to lay when they show a disposition to set, by being confined, as hens sometimes are?

10. In your replies to poultry inquirers, you observe that eggs intended for setting, should be as fresh as possible, and that keeping them in any manner injures them as setting eggs. Now it happened with me this spring, that not having turkey eggs enough at any given time, I had to wait some weeks before I could obtain enough. Could they in such case, be kept in salt, if intended for setting, and how long would they be good? Moreover, eggs are sometimes laid in intensely cold weather, when if exposed for one day, they would be too much chilled.

11. You observe that limestone gravel is good for them. Is not lime in any form equally good, whether slaked or unslaked, or in the form of old mortar?

12. Some think that the first offspring of animals is generally smaller than the subsequent offspring, and therefore that it should not be reserved for breeding from. In the case of poultry, I know the egg from pullets is smaller than from older fowls, and I suppose, of course, the chick is smaller also; but my experience does not enable me to say whether the above theory is right or not. What think you?

13. Fowls are said to decline after the age of 3 years. Can they, if old, be made tender and fit for the table by being fattened?

14. Some think that the eggs of ducks and geese will not hatch well, unless kept moist by making their nests on the ground, or unless they are occasionally moistened. Is it not an erroneous opinion, and should not all eggs be kept as dry as possible? Should boxes for nests be made without plank bottoms, and so that the hay or straw forming the nest should rest directly on the ground?

15. Should the thread by which grafts are bound, be untied during the first year of their growth, and if so, at what time?

16. Does the strawberry bear the male and female organs on the same plant; and if not, how are the different sexes to be distinguished, and in what proportions should the sexes be planted? There is a diversity of opinion about this matter. I have always thought that the same plant produced both sexes.

A SUBSCRIBER.

Liberty Mills, Va., 1843.

1. The change which takes place in plants, fruits, &c. is based on what are called the "sports of plants," in which some new quality is accidentally developed, and then by cultivation becomes fixed and permanent. As a general rule, the seed of any plant will reproduce itself unless affected by crosses, and this power is limited; but the accidental development of new forms and qualities, gives the means of increasing the varieties without number. A full and beautiful explanation of the manner in which this is brought about, may be found in Prof. Lindley's Theory of Horticulture, page 281.

2. A satisfactory answer to this query, will be found in the communication of "A. B. N." in this number.

3. Sap wood can never be rendered as durable as heart wood, as it is not perfect or matured. Its durability may be increased by covering it with a coating of pitch, which should be applied hot, so as to penetrate the pores as much as possible.

4. If sprouts are allowed to remain on potatoes in the spring, they soon become worthless, as the roots from these sprouts will soon penetrate the tuber in every direction. The tuber is the natural supply of food provided for the nourishment of the young plant, and the real roots from the shoots soon avail themselves of it.

5. Carrots seem at times disposed to run up to seed the first season. We know no cause for this. The season, the soil, or the seed, may all tend to produce this result. The injury is rarely extensive from this source.

6. Asparagus roots *do* eventually penetrate to a great depth, and that is the reason why the soil should be proportionably deep and rich. As the roots are not to be removed, it is the more necessary the ground should be well prepared in the outset.

7. Sheep cannot be safely folded in hot weather. To attempt it, would be to renew the scenes of the Black Hole at Calcutta. Sheep may be driven at night upon fallows where their manure is wanted, but they must always have room and fresh air, or fatal diseases will ensue.

8. We know of no grass sufficiently fine and close for a good turf naturally; and almost any of them will make a smooth close turf when sown thick on a good soil, and kept close by repeated mowings or clippings. Where plaster is used, it is almost impossible to keep out white clover, and where this is not wanted, dressings of fine garden mold compost, well raked in, will be better than plaster.

9. We have not been in the habit of rearing turkies. Will some of our correspondents who are acquainted with the habits of this fine domestic bird, reply to this query?

10. Eggs can be kept for months, and yet hatch with great certainty, if preserved at a medium temperature, or one equally avoiding extremes of heat and cold during the time. Experience, with us, shows however, that in spite of all care, new eggs, and those exposed to the fewest changes of temperature, will hatch better, and produce more healthy and vigorous young, than eggs kept for any considerable time.

11. Lime in any form is good for fowls; and particularly if given in the form of old mortar. We prefer limestone gravel, because fowls find in it the materials necessary for grinding their food.

12. There seems to be some good reason for the opinion adverted to by "A Subscriber." Maturity seems as necessary for the perfection of reproduction in animals as in plants. The imperfection arising from first offspring, is perhaps more obvious in swine, than other animals; perhaps from the fact that they are capable of reproduction earlier than most others.

13. No old fowl can be made fit for the table, or tender, by being fattened. Our correspondent can easily satisfy himself on this point.

14. All eggs hatch better for being kept dry, and at a uniform temperature. Geese and ducks go from the water to their nests, but the eggs do not hatch in consequence of this wetting, but in spite of it. Eggs of these birds hatch better when they have access to water, as their animal heat or health is depending on this. It is better to give a sufficient depth of straw, than to have the eggs lie on a plank, or on the ground.

15. All fastenings used in budding or grafting, should be unloosed as soon as the union of the parts is complete. This is more necessary to be attended to in budding, than in grafting, where wax or clay is used instead of strings or bark.

16. In most cases, the male and female organs of the strawberry are so distributed in each blossom, that there is no difficulty in the production of fruit. In some of the varieties produced by cultivation, however, this is not the case, and unless the difficulty is remedied in the selection of plants, a whole bed may be barren. The fertile flowers may be ascertained by their possessing both the stamens and pistil. Where these are deficient, the difficulty must be remedied by choosing different plants.

RAIL FENCE.—(Fig. 79.)

MESSRS. GAYLORD & TUCKER—This cut gives you the plan of a rail fence, constructed in this part, which we consider *wind* and *hurricane* proof.

There are many places on nearly all farms, where a *common* fence will stand but a short season, on account of the bleakness or great exposure to driving winds, which often remove a fence almost bodily from the foundation, scattering the rails hither and thither, for rods, and thus affording an easy ingress for stock, into fields of grain, or opening the way unto forbidden ground.

Now what is the *primary requisite* in constructing fence, and what the *primary object?* Why, most unquestionably, *stability and firmness*, and to *prevent stock from destroying crops.*

If a farmer has poor fences, which are not sufficiently substantial to withstand the fury and force of wind and animals, however assiduous in labor, and judicious and frugal he may be in his management, if he has the consciousness that he cannot resign himself at night, into the gentle embrace of sweet *Somnus*, because of the danger of his stock destroying the reward of his toil, he had better "hang up the fiddle," discontinue all other business until the source of this unceasing vexation is cut off—until he can enjoy that tranquility of mind which ought to characterize every cultivator of the soil.

This fence is constructed precisely like the common rail fence, until it is eight rails high, (higher if necessary,) and then rails or poles are laid on the top, extending from the middle of one panel to another. Stakes are then set in the ground close to the bottom rail, in each crook or corner, inclining into the corner formed by the top rail and the pole. The small dots in the cut represent the stakes; and farther description is deemed unnecessary.

You will readily perceive that it will be a hard matter for the wind to overthrow such a fence on the reaction of the rails, poles and stakes; and ere it can be removed, a great force must be applied. And furthermore, it does not occupy as much space as the common stake and rider fence; and if riders are laid on these stakes, its stability is exceedingly augmented. Such fence is generally made for the sake of economy; and it is the only fence which should be made in bleak situations, especially between farms on the line. For nothing has a greater tendency to perpetuate the peace and harmony of neighbors, in one respect, than maintaining a good line fence. And it is far more advisable to hallucinate by building a little too high and firm, than too low and tottering. Above all, poor fences should ever be avoided: for nothing is so productive of mischief and of incalculable evil. By them, the farmer too often sustains many great losses; and that too, in various ways. By depending on them, he loses his time, his labor, remuneration for his labor—his stock become unruly—neighbors are set at variance—detestable animosity is aroused—restitution appeals to the hand of justice—and then, *hurrah for litigation!*

Yours, S. E. T.

Lansing, Tompkins co., N. Y., 1843.

WINTERING CATTLE.

MESSRS. GAYLORD & TUCKER—I believe it is the doctrine of your most excellent paper, that the wintering of cattle is best accomplished by having them confined to good warm dry yards during the day, and at night to stalls and stables, kept clean, well ventilated and littered. I know not, indeed, but I may say without fear of contradiction, that such is the opinion of every agricultural paper, and also of every enlightened agriculturist in this or any other cold climate. Taking the fact therefore for granted, I am utterly at loss to conceive how the practice, almost universally prevailing in this section of country, should continue, of allowing cattle during winter to feed at stacks in open fields, unprotected from winds or storms, and allowed to ramble at large upon highways frequently, at some distance for water, to the incommoding of travelers, and imminent danger to the poor beasts themselves. If such a method of wintering stock is best for them, and most profitable for the owners: and it must be they think so, and are well convinced of it, or surely they would not go on from year to year, in the same way, "unvarying and unvaried." If then, the practice adopted, (I may almost say universally,) is the most correct, economical and *humane*, and tends to produce the finest animals, and enrich the owner to a greater extent than the contrary, the system is brought to perfection among us; for you can see the complete exemplification of it every day, of the poor cattle marching and countermarching in single files, from the stack to the brook, and back again, halting occasionally behind a fence or sunny side of a snow bank, to reflect on the beauties and *comfort* of their "unhoused free condition," and regret that the days of "sweet summer" are coming again, when they will be debarred the glorious privilege of roaming free as the winds that whistle around their unsheltered heads, and be pent up within the enclosure of a single field. Such an *economical* free wintering, without *care or trouble*, generally gives to cattle a *remarkable* fine glossy coat and mellow skin, and fleshy, or rather fleshless bodies in the spring.

If, Messrs. Editors, the above described method of keeping cattle through the winter, is the best, and the almost universal practice proves it, then I think you must fairly be convicted of heresy in this particular; and any more "pictorial illustrations" of barns, sheds, stables, stalls, and all the appliances for feeding stock profitably and economically, and all those excellent essays from yourselves and correspondents, on the necessity of increasing the quantity of manure by the proper construction of barns and barnyards, ought immediately "to cease and determine." There are many, I know, who maintain that cattle to be well wintered need only to have plenty to eat, and that stabling or sheltering them is all moonshine; and besides it is so much *trouble*, they can't think of it. I am inclined to think this free wintering system will do best for a large farmer, who has plenty of forage to waste; but for one who wishes to make the most of his supply of winter keep, the confining them to good yards during the day, and at night tie them up in good warm stalls with plenty of dry litter, will much better subserve his purpose. The extra trouble will be more than compensated, by the excellence and quantity of manure, and the thrifty and contented appearance of his stock.

I have written this to elicit some remarks from yourselves on the subject, which I consider of vital importance to us farmers in this country of long winters, and not with the expectation that you will deem it worthy of an insertion in your excellent paper.

Clinton, Dutchess co., April 15, 1843. P.

WHEAT CULTURE IN ALBANY.

MESSRS. GAYLORD & TUCKER—As you encourage the cultivators of the soil to publish the results of their efforts, I take the liberty of mentioning a small experiment in raising winter wheat on Patroon street, about a mile and a half from the capitol. About the 12th of October last, I sowed half an acre and 14 rods on ground which had been planted with potatoes. The seed sown was about a bushel and a half, rolled in plaster. The ground was plowed but once, but was well dragged. No manure was put on it after the potatoes were gathered. The crop has been lately gathered, threshed and cleaned, and the produce is 21 bushels of clean plump wheat, or 37½ bushels to the acre. The whole expense may be estimated as follows:

Plowing and dragging,	$2.50
Seed,	1.50
Harvesting,	2.00
Threshing and cleaning,	2.50
Amount of expenses,	$8.50
Produce of wheat,	$21.00
Straw,	2.00
	$23.00
Deduct expenses,	8.50
Leaving a profit of	$14.50

The principal error consisted in sowing too much seed. If one-third or one-half less had been sown, I am convinced a much better result would have been produced. The soil is clay, and I think the experiment proves that the clay lands in the vicinity of this city may be made highly productive as well as ornamental, by a proper culture. Indeed, there are vacant lands, or lands imperfectly cultivated, within three miles of Albany, which, if rightly managed would support one-third of its population. Yours, &c. A. B.

Albany, Aug., 1843.

BREEDING—FEEDING CALVES, &c.

MESSRS. GAYLORD & TUCKER—I see by the August No. of the American Agriculturist, and the last number of your paper, that a controversey has commenced on "*breeding.*" This I hope will be carried on in friendship and good feeling, for it is a subject that will render much benefit to the country. Able and united opinions, given cheerfully, candidly and liberally, must enlighten those who read, and stir up the spirit of those who advance them; therefore I give all speed to your labor, and will join in the effort with good nature, as soon as an opportunity offers, and you are settled down to cool argument. In the meantime, I will give Mr. J. W. Smith, the desired information he solicits on my system of feeding calves.

I have a small boiler that contains about thirty gallons of water; I put in about twenty-five gallons, and about twelve quarts of linseed; keeping it well stirred, to prevent burning at the bottom, whilst boiling over a "slow fire," for two hours. As soon as the oil is sufficiently extracted from the seed, I strain it through a sieve, and when cold it becomes a thick jelly. The same boiler is about half filled with water, and a large tin warmer about two inches smaller in circumference, (with two side handles to lift in and out,) in which I heat the milk, adding a fifth jelly; the water between the two vessels prevents the milk from burning, which is a great injury to calves. I gave it then about the same warmth as from the cow, morning and evening, and they did very well; should they scour, give them a small ball of mutton suet, or part of a tallow candle, and it will stop it at once.

Allow me to tell you that I have had a number of breeders from all parts of the United States to view the Herefords, and most of them say they are agreeably disappointed; they expected to see from the accounts they hear and read of them, coarse plain animals. Now, Mr. Editor, I will place them in a *position for proof.* I will show six or ten breeding cows and a bull, all *pure Herefords*, against the same number of *any breed*, from any herd in the United States, for beauty, symmetry, quality, milking, and activity for breeding working oxen, for a silver tankard, value fifty dollars, and meet half way between the acceptor. I do this to defend, and not to "*brag.*" I will leave this challenge open for one year. On the first of January, I will give you a statement of the butter made from fourteen cows, but it will not be an accurate one. I have sold cream, cream cheese, and new milk, of which I have not kept any account. I will give you the actual weight of the butter made, but it will not come up to some of the statements of your correspondents. I shall have several excuses to make this year, but next year shall be a fair trial.

Hereford Hall, Sept. 15, 1843. WM. H. SOTHAM.

CLOVER AT THE SOUTH.—It has long been supposed by many, that clover could not be grown in the south, the climate being too hot and dry for the plant. A Mr. Rose, however, in a late no. of the Southern Planter, controverts this position successfully, and from his own experience. The difficulty seems to have been sowing the seeds in the spring, when they would germinate, but perish during the hot summer. He sows the first week in October, and even earlier, preferring a stiff clay soil, as he has not succeeded on light sandy ones. One piece of red clover sown by him, was cut six years in succession, the last five years for seed.

ORR'S AIR TIGHT STOVE.—(Fig. 80.)

MESSRS. GAYLORD & TUCKER—Having experienced in my own establishment, the comforts and advantages arising from the use of the air tight stove, I am desirous of fulfilling the injunction of the Holy Book, in "doing good," by communicating through the pages of your widely circulating journal, a knowledge of that invaluable appendage to our household arrangements. To this end, I have procured from the agent for the manufacture of these stoves in Philadelphia, W. W. Hughes, 45 Walnut st., a stereotype cast of this very neat and elegant parlor stove, an impression from which I should be pleased to see transfered to your columns, that the knowledge of it may be extended from "Maine to Georgia;" it being, in fact, as well adapted for the south as for the north; the facility of *diminishing* the heat, being as great as for *increasing* it, fitting it equally for both. Indeed, the value of it cannot be apprehended but by experience; I can therefore only say with my friend Mr. B. Cooper of Camden, "I would not be without one for ten times its cost."

Before using, it will be necessary for the protection of the stove, to spread about two or three inches of wood ashes over the bottom, and upon this place the wood; the fire is regulated by raising or lowering the door, the smallest aperture being sufficient for a strong draft; a valve in the smoke pipe facilitates the arrangements, by giving the power to extinguish the fire almost instantaneously when desired. With regard to the actual consumption of wood, much must of course depend upon the degree of heat required, as also upon the size or number of the apartments to be warmed; but to say that the quantity might be reduced to one quarter part, under any circumstance, is, I conceive, far below the mark. Nor is this consideration *one quarter part* its real value; for, as has elsewhere been said,*—"The price of the air tight stove might be saved in the difference in the cost of fuel in one winter; but the convenience, cleanliness, comfort, and *consolation* arising from having at all times, by night as well as by day, just so much heat and no more, as you desire, and all regulated in an instant, by merely turning off or on the draft by the finger and thumb, are justly inconceivable, and not to be appreciated but by experience. The fire is made up in the morning by supplying half a dozen short billets of wood; and no more will be required, under ordinary circumstances, for twenty-four hours, or perhaps more; the stove being closed on retiring for the night, during which the process of *charring* goes on, but no flaming. I am tempted to say, I closed tight the door of my stove at 10 o'clock last night, and having occasion to rise at three this morning preparatory for a journey, I found the atmosphere of the room 70 degrees of heat by the thermometer at the farthest part from the fire; and by raising the draft half an inch, I increased it to a degree that quite surprised me. I calculate that one-tenth part of the wood required to heat a room by burning in the open chimney, will be more than sufficient to keep the same room at the same temperature, by means of the air tight stove. And then, the convenience of having to light the fire but once during the winter; and taking from the stove in the morning, charcoal for lighting the other fires in the house, will render it the most profitable, as well as the most desirable, of all the numerous contrivances that have come down to us in the shape of about 500 varieties of stoves of all sizes, shapes and prices. And then, the very prevalent complaint of bronchitis, will, I am satisfied, be avoided; for with me there is no question, that the cause of that disorder is attributable to the inhaling of air that has passed over a red hot body of metal, by which, having been deprived of its oxygen, it is rendered unfit for respiration. For the sick chamber too, it is peculiarly well adapted, as it emits no unpleasant smell; creates no noise or dust in managing; diffuses a genial glow that can be regulated to a *degree*, by means of a thermometer; keeping it to that point recommended by the attendant physician—a point which in many cases might be of vital consequence; while to the practitioner himself, whose hours of attendance are uncertain to a proverb, and whose nights are so often broken in upon by professional visits, the use of this stove would appear absolutely necessary to his well being; for on leaving home, he can regulate the draft of the stove so as that in an instant on his return, after an absence of twelve hours, he may raise the heat to any degree he might choose. But to none will this stove be more convenient than to the farmer, whose concerns so often call him and the members of his family abroad, or into the kitchen or dairy, at which time friends might call, and render a fire in the bettermost room very desirable, although but for a short time; it is, therefore, only to have the stove pretty well filled with wood in the morning, closing the door, and he has it in his power to give his warmest friend a correspondent welcome, by opening the draft of the stove, and on his taking leave, to close it; and as effectually put a stop to all farther expense of fuel, be it even until the end of the day. In short, I know of nothing of the kind that can at all compare with the air tight wood stove, either for economy, comfort, cleanliness or convenience."

And to all this I bear willing testimony, after two year's experience, during which I have never encountered the least trouble or difficulty in the management, or entertained the most distant idea of danger from explosion. It is said these stoves have been constructed so as to burn coal; but I would remark, as the object is oftentimes as much to diminish the heat as to increase it: nay, to extinguish the fire suddenly, and as suddenly to rekindle it, I cannot imagine that any fuel would be so convenient for the purpose as wood; at the same time, that of the hardest quality is much to be preferred, hickory being of more than double the value of pine; it is also more economical to use it as large as can be made to pass in at the doorway of the stove. And in many other ways will the use of these stoves prove of the greatest comfort and convenience, particularly in the cool and chilly evenings and mornings of spring and autumn, as also during the prevalence of damp weather at these and other seasons of the year, when a fire for a few hours only, might be the means of warding off a fit of sickness; while in damp and unhealthy situations, as also in newly erected habitations, the savings in physician's fees have often been more than the cost of them, twice told; a handful of kindling wood being sufficient to cause the diffusion of a sensible degree of warmth throughout the room, and carrying off the damp atmosphere; nay, it is a fact, that the burning of a newspaper only has been often known to cause a very perceptible degree of warmth in the room on a chilly and damp evening in summer. In short, I know of nothing that I would accept in exchange for my stove, if I had not the power to replace it. Your subscriber and constant reader,

Eastern Shore, Aug. 14, 1843. JOHN W. SMITH.

* Farmer's Cabinet.

SPADE LABOR.

MESSRS. EDITORS—Having been present at an interesting conversation which took place on board the steam ferry boat between Philadelphia and Camden, N. J., on a subject which is not always "understood," but much "seen and felt," I have a desire to record it for publication in your valuable pages. It was commenced by a lad of fourteen, who, on counting the receipts for a quantity of Jersey truck, which he had sold in Philadelphia market, observed, in soliloquy, "One thing's sartin; if we don't put down these canals and railroads, they'll soon do us up: 'tis no use, any longer raising early truck for 'delphia market; the Baltimore folks get there afore us, and that's what I call robbing the milk of the cream." A passenger observed, "Ah! machinery will be the ruin of this country, as it has been that of every other. When I was young, a man could live by his labor, and there was then plenty of employment; but now, what's a man to a steam engine! Such things ought not to be allowed; there are already too many improvements in every branch of business." To which an old farmer replied, "And yet, friend, this has been the case for years, and will no doubt continue as long. But what are the improvements of the present day, compared with the substitution of the plow for the spade in husbandry? If you and I had lived at that time, I dare say we should have expected starvation; and yet people lived through it you see. The plow, however, was only the substitution of one implement for another; the spade itself being also a machine—an innovation on nature's own machinery, the *thumbs and fingers.*"

These observations opened, unexpectedly, a very interesting debate upon the real advantages of the plow over the spade, in which it was by no means evident that they were very much and decidedly in favor of the former; nay, in more instances than one, it was attempted to be demonstrated that, taken for all in all, the spade was to be preferred. A person present remarked, he had seen nearly a hundred men, women, and children, digging in a field in France, where were four plows going at the same time; the proprietor of the land assuring him, that he considered the economy of the plow not quite so decisive as was generally believed; the superiority of the crops, both in quantity and quality, and the condition of the land after spade culture, often paying very handsomely for the extra expense; while the occupation which it furnishes for the agricultural population of a country, is of still farther importance. In his estimation, the greater facility rendered by the plow, was of more consequence to the husbandman, than the difference in expense.

Reflecting afterwards on what I had heard, and remembering that I had somewhere seen an interesting account of a set of experiments that had once been made in England, for the purpose of ascertaining the difference in cost and produce of the two systems, I turned to an agricultural work of the time, and was so fortunate as to drop on it; here it is:

"Mr. W. Falla of Gateshead, Newcastle upon Tyne, gives a detail of experiments made during four years in succession, in the culture of wheat by the spade, which places this mode of tillage in a very favorable light. He had long cultivated a nursery garden of one hundred

acres by this method, when his attention was directed to the spade culture of wheat, on learning that an experiment had been made at Fottingham, the result of which was beyond all example. From Mr. Falla's statement of the expense of digging and sowing one acre of land broadcast with wheat, including the price of seed, it appears that the cultivation by the spade cost five shillings sterling more than by the plow; but the comparative value of produce was so great as to leave no doubt of the vast superiority of the former method; for averaging the crops of two years raised by spade cultivation, they gave for each year, sixty-eight bushels and a half per acre. The average produce of his neighborhood, raised by the plow, being twenty-four bushels per acre. But, instead of taking that as a criterion by which to make a comparison, in the autumn of 1819, much pains were taken to ascertain the exact quantity of wheat contained on a field immediately adjoining, and which was considered a remarkable crop; by which it was proved to be thirty-eight bushels per acre. This was on land of naturally better quality, quite as highly manured, and worked in the usual manner by a two horse plow, the crop sown also broadcast. Stating the wheat at eight shillings per bushel, the then market price, the following was the result:

By the spade, 68½ bushels per acre, at 8s..	£27	8 0
By the plow, 38 " " 8s..	15	4 0
The difference,.....	£12	4 0

Being the advantage gained by the extra expense of five shillings sterling."

It is added by way of remark, "It is well known that water enters so largely into the food of all plants, that if its gradual supply can be secured, the husbandman feels assured of a fair return for his labor; whatever mode of cultivation, therefore, can best effect the object of drawing off from the seed or plant an *excess* of water, and retaining the surface as a reservoir from which a gradual supply of moisture may be obtained as required, must possess decided advantages. It is also known, that to obtain the best crops, the soil ought to be well broken and separated; and the nearer it is brought to the state of garden mold, the more perfect the cultivation. And these facts no one will dispute, nor will any deny, that the spade is better calculated to prepare a better recipient than the plow, for an excess of water in rainy seasons, and to return it to the seed or plant afterwards, in a manner more favorable to vegetation. The spade, wherever there is sufficient soil, opens it to a depth that allows the water to pass freely below the bed of the seed or plant, and to remain there until a long continuance of heat draws it forth again, to replenish the crop when it most requires to be gradually supplied with moisture; and the greater depth to which the soil is opened, the greater will be the advantages of this important operation. But the action of the plow upon the soil is the reverse of that of the spade, in the following important particulars. Instead of *loosening* the subsoil, it hardens it; the heavy, smooth surface of the plow, and the frequent trampling of the horse's feet, tend to form a substance on the subsoil well calculated to prevent the water from penetrating below it; and in many soils, after a few year's plowing, it is there retained, to drown the seed or plant in rainy seasons, and to be speedily evaporated when it would be the most desirable to retain it; and thus the crop is injured and often destroyed in dry weather, for the want of that moisture, which under a different system, might have been retained in the subsoil—that system being *culture by the spade*."

Now, although it is not probable that cultivation by the spade will be practiced in the United States for many years to come, yet, there is no question that the mode of its operation is incomparably the best adapted to the raising of large crops. How all-important then is it, to select those plows which are best suited to the purpose of *pulverizing the soil to the depth it is turned*, after the manner of the spade, without regard to the smooth and shining surface displayed on the upturned furrow, or the clean and well pressed edge of its land side; qualities which are deprecated in the garden, where, it is acknowledged, is found the best system of culture. The subject is so important that I may turn to it again; in the meantime, I subscribe myself your friend and constant reader,

Springfield, N. J., Aug. 16, 1843. J. D. C.

ANSWERS TO INQUIRIES FROM N. CAROLINA.

MESSRS. GAYLORD & TUCKER—With you, small grain and the grasses, with roots, appear to be the staples; with us, cotton and Indian corn,—for a market, almost exclusively the former. Manures, as you are probably aware, have received very little attention here. "No time" to raise manure. The grand object has been to clear, and hence to wear out, to abandon; but to improve, appears never to have entered their system. "Book farming" and "book farmers," are speckled birds in our country, and for a man to adopt and persevere in any course of improvement, requires a moral firmness which few of us possess. What may have increased the difficulty in regard to improvement, is the want of many of the articles which are so conveniently obtained by you. In the interior of North Carolina, we have neither lime, marl, plaster, bones, nor many of the numerous articles of compost in use with you. If we obtain them, it must be by purchase, and that with much expense and trouble, the cost of transportation often exceeding the prime cost. Your population is more dense, your towns and cities more numerous, your facilities greater; and hence you obtain all you want much cheaper and easier. My land is somewhat rolling and stoney, being near the commencement of the hill country. From the abundant and luxuriant growth of sorrel all over the cultivated part, I presume *lime* would be the grand dispossessor of this enemy of the farmer. But this article, selling in New-York from 80 to 100 cents, costs us at least $2,00 per bbl. exclusive of hauling 12 miles. Now, an interesting question arises. Can I use lime upon my soil to advantage and profit, at this great expense; especially as I observe from the remarks of Dr. Dana, that a little lime, like a "little learning, is a dangerous thing," or in other words, that the quantity must be abundant to realize the benefits desired. What is the least possible quantity to be operative, and should it be sown broadcast and plowed in? I have had an idea of mixing equal quantities of lime and wheat, and sowing together. What think you of the plan? *(a.)*

I have before my eye a field, a part of which I wish to devote to a vineyard. It is a little undulating; light sandy soil; having clay foundation some two feet below the surface; open to the south and east, and protected on the north and west by a thick forest, and last, though not least, very poor! Now, Messrs. Editors, can I succeed here? "Not without manure," say you. Very well: can I *with* it? If so, what kind, how applied, and when? Farther, when is the most propitious time for setting the vines, and what are the proper distances? *(b.)*

How will the same field answer for the apple and peach tree, and what kind of manure is best, particularly for the latter? I am almost deterred from attempting to rear the peach, from the numerous diseases to which I perceive it is subject. At what age should the peach tree be removed from the nursery to the orchard; and at what age of the apple tree is grafting to be performed? *(c.)*

I notice the recent advice of an agricultural journal, to "cut down, put into piles, and as soon as dry, have burnt," all the weeds and briers with which the land is infested. Now I have just been pursuing a very different course from this, and am in doubt as to its propriety. I have a lot of ground which I have taken into my grove, and was formerly under cultivation. Upon it has sprung up a vast quantity of weeds and briers. These I have had pulled up, hauled to my stable yard, and while yet green, thrown into heaps as follows: 1st. A layer of wet wheat straw; on this I sprinkled a course of *slaked* lime; then a layer of clay, (designed for a sandy soil;) next a layer of weeds with lime sprinkled thereon; then the clay, &c. until my heap was completed. Now, gentlmen, shall I next spring have a pile of *manure*, or shall I have millions of weed seed, to be scattered over my land? If the former, is my compost judicious, or could you have improved it? I have half a mile off, good swamp mud, but "I hadn't time" to get it up. Withal, I thought the clay would do well for the sandy soil. I recently made a large heap composed of scrapings of wood yard, pine leaves, litter from the stables, and lime, alternately mixed, and think I shall realize from *this* pile a parcel of good manure. When making this pile, a conversation occurred between one of my servants and myself, which permit me to detail. He was engaged in spreading lime, and with a thoughtful air he asked: "Master, what do lime cost, sir?' "Two dollars per bbl., Bob, besides the hauling." He did not reply, but from his inquisitive and sceptical look, I opined that he doubted—if not the utility, at least the profit of the application. "Why Bob, do you think we never shall get repaid for our lime?" "I don't know sir, but it looks like as if it was all lost." *(d.)*

Now, gentlemen, do you think with Bob, my lime will all be lost, or will its use here repay me at $2,00 per bbl., and hauling? *(e.)*

What is your usual practice in regard to sowing oats, as to time? With us, it is universally done in the spring; but from the frequent failures owing to wetness, &c. of the weather, I have been disposed to try the sowing them in the fall. My neighbors say it won't do, the winter will kill them, and I am almost afraid to try the experiment. If I am not mistaken, however, I think the northern practice is to sow in the fall, and if so, your winters, much more severe than ours, do not kill them, and I should suppose they would stand our climate. Please enlighten me. *(f.)*

The beautiful grass plats and pleasure grounds of the north have frequently attracted my attention, and I should be pleased to know how their beauty and regularity are obtained. Are the grass seeds sown where designed to stand, or is it done by turfing? When should the seeds be sown, what preparation is necessary, and what kind mostly used for this purpose? *(g.)*

The idea which I have heretofore attached to the term "meadow," is inseparable from that of low, swampy bottom lands, and this is the definition given it by Webster. Yet from the knowledge I have of the geography of the northern states, I presume your ideas of the term are more enlarged, or at least your practical use of meadows are not confined to the low lands. Am I right in supposing your high and rolling lands devoted to the grasses, or are they exclusively confined to the bottoms? Are such locations as I have described mine to be, undulating, gravelly, dry, adapted to the growth of grasses, and if so, what preparation is necessary to bring them into cultivation? *(h.)* WM. H. WILLS.

Rocky Hill, N. C., Aug. 30, 1843.

(a.) Lime is undoubtedly one of the best applications on lands disposed to a growth of sorrel. The quantity used may be from 50 to 100 bushels per acre, and it will generally well repay the expense. Has our correspondent tried plaster on his land? We think it would act favorably. Sowing lime with wheat, is an excellent practice. His letter found us engaged in brining and liming seed wheat for our fall sowing. The preparation acts favorably on the seed, aids germination, and prevents smut.

(b.) We should think the vine would succeed well on the ground mentioned. Vegetable manure, such as decomposed leaves, weeds, &c. is the best manure for vines. As the vine is to be permanent in the soil, it matters little when the manure is applied, if only there. The prunings and leaves of the vine itself, furnish the best of dressings, if covered in the soil when first taken off. April or May, is the best time for planting the vine, or perhaps it might do earlier there. The distance will depend on the manner of training. If single and upright, as in most foreign vineyards, six feet apart will be sufficient; some put them at four feet.

(c.) The planting of apple and peach trees in the same field, should be avoided if it can conveniently be done. From two to three years of age is the best time for removing the peach; and grafting may be performed on the apple tree at any time after the first year's growth.

(d.) Our correspondent's treatment of his weeds and briers is an excellent one, provided the fermentation produced in their decomposition is sufficiently active to destroy the seeds of the weeds, which it doubtless would be. Clay pulverized or made fine, is a good addition to a compost heap intended for sandy soils. We have known the spreading of clay alone on such soils, produce an astonishing effect as retaining the water necessary for vegetation. The best compost is made of barn yard manure and swamp muck, one part of the former to two of the latter. Swamp muck is a treasure to the farmer.

(e.) Lime will not be lost applied to sandy soils; but clay marl, or a mixture of clay and lime is better. Has our correspondent ascertained that the clay underlying his sand, does not contain lime? We think it probable it does, and that the means of improving his soil are nearer than he supposes.

(f.) Oats are *never* sown in the fall at the north. The winter here would inevitably be fatal. Experiment would show him the result there.

(g.) Grass plats or pleasure grounds are formed here by sowing the seeds, although they may be made by turfing. After the grass is once rooted, it is kept smooth and even by frequent cutting. The thicker the roots of grass, the finer and more even the turf.

(h.) Formerly the term "meadow," was used as our correspondent supposes. Under the New Husbandry, or that based on a rotation of crops, every part of a farm is in succession meadow or plow land, and the best farms are those on which this system is most fully carried out. We pasture, mow, raise corn, roots, or wheat, as the course may be, successively, on the same ground, and when well conducted, without fear of exhaustion. The New Husbandry knows no 'old fields,' 'meadows,' or 'swamps,' as such; all are made to produce any crops it is desirable to put upon them.

MESSRS. GAYLORD & TUCKER—Will you permit a recent subscriber to trouble you with a few inquiries on the subject of *Muck, Compost,* &c.?

Being "seized and possessed," (as the lawyers would say,) of two or three hundred acres of land in the immediate vicinity of this place, and having some little turn for agricultural pursuits, I have lately been thinking whether my little farm might not be turned to purposes of profit as well as amusement. To this end, I see that I must give all attention to the subject of *manures*. But how to make the greatest quantity at the least trouble and expense, I would be glad to know. I have been trying *clover* for two or three years; but I fear that our southern suns will ever prevent it from being such a fertilizer with us as it is with you. Last November, I made a compost heap of burnt clay, stable manure, and leached ashes, and hauled it out in February and March, upon my meadow. The effect has been such as to encourage me in further attempts to add to my stock of manure.

Having seen a good deal said in the late numbers of the Cultivator, on the subject of *muck* or *swamp mud*, I hope you will excuse me for inquiring farther about it. Within two hundred yards of my field, there is a small pond which covers about two acres in a rainy season, but is sometimes dry during our long summers. When the water first subsides the bottom presents the appearance of swamp mud, of a rich dark color. But after being exposed to the sun a few days, it becomes somewhat ashy in appearance, splits or cracks in various directions, and seems somewhat tenacious or tough. When thoroughly dried, it resembles that well known domestic article, rotten stone. Now is this deposit what you call *muck?* And is it, in your opinion, worthy of admission into my compost heap? A learned friend of mine, (but no practical farmer,) tells me it is worth "just nothing." My next door neighbor, (a nice manager, but a young farmer,) hauled a good deal of it into his stable yard two or three winters ago, but found the large lumps so hard to be dissolved that he got out of conceit of it. For my own part, I scarcely ever pass that pond, without thinking that there is a treasure at the bottom of it, if I only knew how to avail myself of it. Will you be so good as to give me *your* opinion on the subject, and let me know what is the best mode of preparing it for the soil. In order to furnish you with every facility for answering my inquiries, I will state that my land is of a light gravelly character, abounding with loose stones, and having a foundation of red clay some six or twelve inches below the surface. *(a.)*

Having despatched this matter, I now trouble you with another query. In making a compost heap, supposing

the materials at hand to be burnt clay, spent ashes, charcoal, pond mud and stable manure, in what order would you place them, and in what proportions? Would you recommend the introduction of charcoal into the heap, or would you rather use it as an absorbent in your stables? Supposing a compost made of the above materials *now, when* would it be fit for use? *(b.)*

Another question. What is the best method of rooting out the wild onion? I am much plagued with it. *(c.)*

Again. What do you and your correspondents mean by a *load of manure?* Is it a one horse, a two horse, or four horse load? G****.

P. S. A correspondent in one of your late numbers, wishes to know how to prevent dampness in brick walls. Tell him, (if he is about to build,) to make his walls hollow, as it is called, or to leave flues or open spaces in the center of the wall, about 12 inches apart, and of the size of half a brick, running from the foundation to the top, the lower openings being on a level with the sleepers, the upper opening into the roof. This prevents the outward moisture from striking through to the inner wall, inasmuch as the currents of air circulating through these flues, carry it off as fast as it penetrates to the center. If your correspondent's walls are already built, the only preventive that I know of, is to wash the exterior with a composition made (as common whitewash is made,) of equal portions of lime and hydraulic cement, colored with copperas, or any other coloring material that may suit his fancy. I need not be more specific in my directions, as there are no doubt many operatives within your reach, who know much more of the matter than I do. If I did not suppose that the method of preparing and applying this invaluable wash was known to you and a majority of your readers, I would take pleasure in communicating it.

Chapel Hill, N. C., Aug. 21, 1843.

(a.) The deposit spoken of by our correspondent, would seem to be what is called swamp or pond mud; composed of vegetable matter, and earth or clay. Its value depends on the quantity of the first article. We should have no doubt of its fertilizing qualities, and should make it into compost with stable manure. If too stiff when dry, use it when moist, or before it becomes dry, after being taken from the pond.

(b.) The burnt clay and the charcoal produce their greatest effects as retainers of ammonia for the use of plants, although the slow decomposition of charcoal also furnishes some carbonic acid gas for the same purpose. The compost heap may therefore be considered as made of swamp mud, ashes, and stable manure. A compost made of one-half muck or mud, one-fourth ashes, and one-fourth stable manure, would doubtless be a good one; although no definite proportion could be given until the character of the mud or muck was ascertained. If in the fermentation of the compost considerable ammonia should be thrown off, a covering of burnt clay or charcoal would be a good application. But in whatever way any of these substances are used, the effect can scarcely fail of being beneficial.

(c.) Thorough summer fallowing is the best remedy for the wild onion that we are acquainted with; careful weeding of the fields, and purity of seed wheat, the next.

(d.) By a *load* of manure, is generally understood, a load drawn on a wagon with two horses, and containing usually half or three-fourths of a cord.

One word as to what our correspondent says about clover. We think if our southern friends would bring to the surface some of the clay which underlies their sands, and incorporate it with them, remedying the unproductiveness of this subsoil when first taken up, by a dressing of such compost as he has described, that one, if not the only serious obstacle to the culture of clover, would be at once removed. Look at the experiments on the sands of New Jersey and Virginia, with clay marl, under the direction of such men as Cooper and Ruffin. The great success in these cases, is ample encouragement to others.

SUGGESTIONS, INQUIRIES, &c.

Messrs. Gaylord & Tucker—As the time is approaching when your State Ag. Society holds its annual meeting, I have one suggestion to make in relation to the statements of those who apply for premiums on field crops. I think those statements should specify the variety of grain grown. There are several varieties of wheat, corn, barley, oats, peas, &c., and frequently much of the farmer's success depends upon the variety of seed sown or planted. Important as this information is, it is almost invariably withheld in the statements alluded to.

When I read Mr. Physick's theory on raising corn, in the last vol. of the Cultivator, I was ready to say he was not a practical farmer. But if we are to credit the statement of Sam'l Phelps, to whom was awarded the first premium on Indian corn, by your State Society, it goes farther to support that theory than any thing of a practical nature I have ever witnessed.

There are, I am persuaded, but few practical corn growers in the United States, that would expect even a moderate crop when planted as thick as Mr. Phelps planted his, and I cannot reconcile his success with my experience, except upon the supposition that he has a different variety of corn from that usually grown. At any rate, if any of our common varieties will produce 122 bushels of good sound corn to the acre, when planted two feet apart each way in the rows, with three stalks in the hill, I should like well to know it, and I will alter my practice accordingly.

Sorrel.—Do you say that land cannot be freed from sorrel, by thorough hoeing or summer fallowing? I suppose that it grew from the seed or root, the same as other weeds, and that the soil could be freed from it by thorough cultivation. If this is not the case, I wish to know what quantity of lime is required per acre or square rod, for its destruction, and also when and how it should be applied?

Should it be applied in the same manner and in the same quantity on meadow, pasture and summer fallow? Should it be quick lime, and is it necessary to apply it in sufficient quantity to injure other vegetation?

I have some patches of sorrel in my fields, and I do not wish to raise it for meadow or pasture, so long as I can grow timothy or clover, and I discover that it is fatal to wheat. Is there not lime enough in some soils when new, if plowed deep and thoroughly mixed, to correct the acid tendency without an external application?

I wish also to make some inquiries in relation to the use of plaster.

1. Does plaster have the same effect on new, as on old and worn out soils?

2. Is there any difference in the plaster that is found in different localities, with regard to its value as a manure?

3. How should it be applied as a top dressing, after the plants are up, or at seeding time; or should it be mixed with the soil previous to seeding?

4. What quantity should be used per acre on meadow, pasture, or on different kinds of grain?

5. Is there danger of using too much, or of applying it too often to plants.

6. I can obtain Grand River plaster for about $3 per ton. Is it good economy to purchase any quantity for agricultural purposes at that price?

7. I have tried manuring corn and roots with long manure, without deriving any benefit. The land being new, the manure cannot be thoroughly mixed with the soil, and in a dry season I get the best crops where there is no manure applied. Cannot the essential properties of manure be retained by occasionally scattering plaster in the yard, until it can be applied in a fermented state to the wheat crop? Last season I applied the manure that was obtained by scraping the yards during the summer, after the long manure was removed in the spring, to the poorest spots in a field that was summer fallowed and sown to wheat in the fall, and the wheat where the manure was spread was decidedly better than in any other part of the field, though the wheat was generally good. The soil is gravelly, and not subject to an overgrowth of straw.

Perhaps I may remind you of the man that Dickens met with on his western tour. But I really desire information on the matters that I have made the subject of inquiry, and there may be other of your readers that will be benefitted by the answers that you or some of your able and experienced correspondents may make to these inquiries. Alonzo Sessions.

Ionia, Mich., Aug. 14, 1843.

Sorrel may undoubtedly be destroyed by good cultivation as other weeds are, but in a favorable soil, or one containing acid, its hold is very tenacious, and a change of the character of the soil by the use of lime, is found advisable. Lime should be applied in the caustic state at the rate of from 50 to 80 bushels per acre. It is best applied to a fallow, some three weeks before the seed is sown, and should be well harrowed in. Deep plowing will doubtless in many cases render unnecessary the application of lime, and on most soils prove decidedly useful to the crop.

Plaster produces a more sensible effect on exhausted lands than on new and fertile ones, the latter not requiring its aid. It produces more effect on gravelly or sandy soils than any other. It may be sown on the fallow before or after sowing, but we prefer sowing it on the plants after they are well up in the spring. When used on wheat after clover is sown, the young plants of clover are almost sure to succeed. From a bushel and a half to three bushels per acre, may be used. The only injury we have known result from the use of a large quantity, was so great a growth of clover as to render it almost unfit for hay. The common price of plaster at the Onondaga mills, is from $2 to $2,50, and immense quantities are used annually at those prices; and we should advise its use in connexion with clover were the prices doubled.

Long manure in a dry soil and a dry season, may be fatal to corn. In a moist soil it will succeed better, as it assists in keeping the ground warm and dry. Long manures are useless as manures, until decomposition commences, and in a dry soil or season this does not take place readily. Plaster is beneficially scattered in barn yards, as is swamp muck, or even common loam; but we believe the best way to use barnyard manure, is to use it for the compost heap with swamp muck, mud from ponds, leached ashes, &c. &c., and fermented in that way, the quantity and value of manure is greatly increased. The fermentation too destroys what seeds of weeds may be in the manure of the yard, and every farmer knows too many are scattered with the dung. The scrapings of the yard are the most valuable part of its manure, consisting of the finer materials, and these saturated with animal matters and salts.

WHEAT CULTURE, &c.

We give the following from a young friend in Wyoming co. in this state, showing the method of cultivating the wheat crop there. He will pardon us for giving an extract from his private note, as we would wish to call the attention of thousands of our young men to the necessity of obtaining a thorough knowledge of agriculture, and express the gratification we feel whenever an inquiring mind is connected with the practical hand. It is from that connexion the most valuable results are obtained; and we feel no difficulty of assuring our young friend of ultimate success, if he shall continue, as now, to unite theory and practice:

"It may not be uninteresting to you to know who your correspondent is. He is a farmer's *boy*, who has seen but eighteen winters—and many sick days. But possessing an inquisitive mind, thirsting for knowledge, he at all times is pleased in searching for truth and knowledge. And being on the farm most of the time, he wishes to understand the theory as well as the practice of farming; therefore he takes the Cultivator."

"Our soil is generally of a sandy loam, and founded upon a rock; this rock comes to the surface in some places, and is at the depth of 20 feet in others. It consists of layers from 2 to 12 inches in thickness. [Moscow Shales of the State Geologists.—Eds.]

"Our procedure of farming is this: In raising any kind of grain, a coat of manure must be turned under or no crop. In the spring, clover seed is sown on the wheat ground, at the rate of from a pound to two pounds to the acre; after the wheat is cut, the young clover makes fine feed for the cattle and sheep, the old pastures being rather lean. In June we commence breaking summer fallow, when the clover is knee high and in blossom. It is then harrowed, (twice, if it is to be plowed but twice,) plowed again about the middle of August, harrowed, plowed the last of Aug. and first of Sept., sowed and harrowed twice. Two bushels of seed to the acre; yield from 20 to 35 bushels per acre. When we sow flint wheat, a bushel and a half is considered sufficient for an acre. The wheat crop in this town is quite light, by reason of not having a crop of clover to turn under last year. The clover seed did not vegetate. What wheat there is, is very good. The wheat that was sown before the rain last fall, is considered the stoutest and the least affected with the smut. Barley is good. Oats and potatoes are very light, caused by dry weather. Corn not very stout, but better than was expected; just beginning to glaze. The timber is mostly oak; a few pines and ash. Would it not be better to sow buckwheat on the fallow, after breaking up, and turn it under at the second plowing, than to let it lie barren through the summer?"

Veterinary Department.

SWINEY IN THE HORSE.

Messrs. Editors—I will give you such information or experience as I possess, concerning the swiney. I had a mare that became swineyed in the hip, occasioned by fighting with another horse. I was told the part affected never would fill up, unless by the operation of some medicine. I therefore bathed the part affected with saltpetre, dissolved in water, and effected a complete cure. Lansingville.

Lansing, N. Y., Aug. 18, 1843.

CURE FOR SPAVIN.

Editors of the Cultivator—The following I have found would cure a bone spavin in its first stages, if properly applied. Add to two table spoonsfull of melted lard, one of cantharides, made fine or pulverised, and a lump of corrosive sublimate, pulverised, as large as a pea—all melted up together, and applied once a day till used up, confining it to the callous. This quantity is for one leg, and may be relied on as a cure. It will make a sore, and the joint will be much weakened while applying the medicine. No need of alarm; it will all be right when healed up. Edward D. Worbasse.

Edon Farm, N. J., 8 *mo.* 26, 1843.

GRUB IN THE HEAD OF SHEEP.

Our Ellington, (Chautauque co.) correspondent, will see that we have somewhat condensed his inquiries. Space compels us to this course. For the kind words and wishes, he and others are pleased to express, we can only say we are grateful, and shall endeavor to deserve them:

"What will cure a sheep that has what is called the grub in the head; or what is still better, what will prevent that difficulty? The symptoms are, ears lop, head droops, bloody watery matter from the nose, in a few days scouring, then the loss of their limbs, and they will eat for some days after they are unable to rise; and lie on their broadside. We are getting into the wool business pretty well in this town, and have lost more sheep from the grub than from any other disease. 16 grubs have been found in the head of one sheep."

The grub in the head of a sheep, is the larvæ or maggot of a fly, which deposits its egg in the nose, generally in the month of August. The egg soon hatches, and the young maggot soon makes its way up into the cavities called the frontal sinuses, where it attains its growth, causing constant irritation and disease, and not unfrequently death. Arrived at its growth, it falls to the earth, enters it, and in a short time emerges a perfect insect or fly, ready to commence the career of reproduction and destruction. We formerly lost many sheep from the grub, and could find no cure for them, or but very partial ones, after it became evident they were diseased. Our course was preventive. About the time the fly made its appearance, which is easily known by their exhibiting great alarm, running from one part of the field to another, with their noses close to the ground, &c. we

caught our sheep, and with a wooden spatula or flat stick, rubbed the nose with tar. We then placed tar on the bottom of our salting troughs, over which the salt was sprinkled, and this brought their noses frequently in contact with the tar. This course we found a great preventive. Sheep, during the period they are exposed to the attacks of the fly, should have access to a plowed field, or if such is not convenient, a few furrows should occasionally be opened in their pastures for their benefit. Inhaling the dust, or rubbing their noses in it, renders the mucus disagreeable to the fly, or enables the sheep to expel the larvæ when deposited. With these preventives we have rarely lost a sheep from the grub, and think that in most cases they will be effectual.

HOG POISONED BY TOBACCO.—A correspondent of the Maine Farmer, says he lately lost one of his best hogs, a very fine one, by its having accidental access to, and eating a few stems of tobacco, which had been boiled for the purpose of making a liquor to destroy lice on an animal. The effect was extensive swelling of the intestines, and then of the whole system, with speedy mortification. Tobacco stems are frequently boiled for the purpose indicated, and great caution should be used in disposing of them.

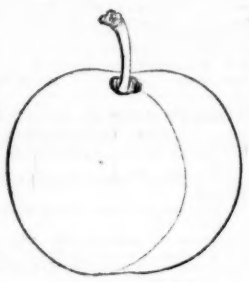
The Garden and the Orchard.

FIGURES AND DESCRIPTIONS

Of Six varieties of Plum, worthy of general cultivation, by A. J. DOWNING.

I. GREEN GAGE.
(Reine Claude.)
(Grosse Reine.)
(Vert Bonne.)

The Green Gage is universally admitted to hold the first rank among plums in flavor, and is every where highly esteemed. In France, this plum is generally known as the Reine Claude, having as it is said, been introduced into that country by Queen Claude, wife of Francis I. During the last century, an English family by the name of *Gage*, obtained a number of fruit trees from the monks of Charteuse near Paris; among these was a tree of this plum, which having lost its name, was called by the gardener, the Green Gage. It is considered by Lindley, as without exception, the best plum in England.

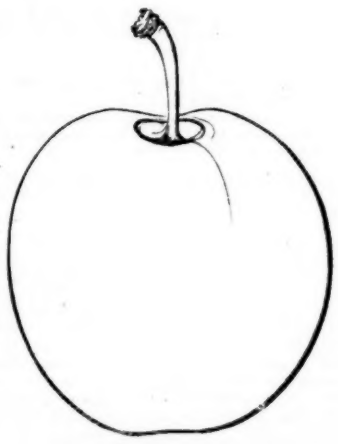

Green Gage.

The Green Gage is a very short, jointed, slow-growing tree, of spreading and dwarfish habit. It is an abundant, and a pretty regular bearer—though the fruit is a little liable to crack upon the tree in wet seasons.

Branches smooth, buds with large shoulders. Fruit round, of medium size or a little below it. Suture faint, but extending from the stalk to the apex. Color green, slightly inclined to yellow, and often a little dotted or marbled with red in the sun. Stalk a little curved, half an inch long, inserted in a small cavity. Flesh yellowish green, exceedingly melting and juicy, and separates in almost all cases, freely from the stone. Flavor exceedingly rich and exquisite. The Green Gage is in perfection about the middle of August.

II. WASHINGTON.
(Bolmar's.)
(Bolmar's Washington.)

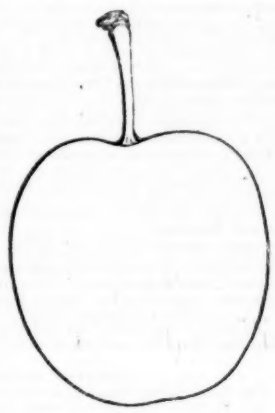
The Washington undoubtedly stands higher in general estimation than any other plum in this country. Although scarcely equal to the Green Gage in flavor, its great size, its beauty, and the vigor and hardiness of tree, are qualities which have brought this noble fruit into notice every where. The parent tree grew originally on Delancey's farm, on the east side of the Bowery, New-York, but being grafted with another sort, escaped notice until a sucker from it, planted by Mr. Bolmar, a merchant in Chatham street, came into bearing about the year 1818, and attracted universal attention by the extraordinary beauty, size, and flavor of the fruit. In 1821, this sort was first sent to the Horticultural Society of London, by the late Dr. Hosack.


Washington Plum.

The Washington has remarkably large, broad and luxuriant glossy foliage, is a strong grower, and forms a handsome round top. Like many other varieties of plum, the fruit of this does not attain its full perfection until the tree has borne for several years. We have measured them very frequently six inches in circumference, and once, from Mr. Bolmar's original tree, seven and a quarter inches.

Wood light brown, downy. Fruit of the largest size, roundish oval, with an obscure suture, except near the stalk. Color dull yellow, with faint marblings of green, and when very ripe, sprinkled with a few orange or crimson dots. Stalk three quarters of an inch long, slightly downy, inserted in a shallow, but rather wide hollow. Flesh yellow, firm, very sweet and luscious, separating freely from the stone. Stone pointed at each end. Ripe middle of August.

III. IMPERIAL GAGE.
(Imperial Green Gage.)
(White Gage of Boston.)
(Flushing Gage.)


Imperial Gage.

This is a very valuable plum, raised from the seed of the Green Gage, by Wm. Prince, Flushing, L. I. It is larger than its parent, being often nearly as large as the Washington, and is perhaps more regularly productive than either of these varieties. It is an exceedingly rapid grower, but with darker green, narrower, and smaller leaves than the Washington, and with very long upright shoots. In the neighborhood of Boston and New-York, this is esteemed as the most valuable and profitable of plums.

Branches slightly downy. Fruit large, with a distinct suture, pretty regularly oval. Color before fully ripe, green; when ripe, pale yellow or yellowish green, with abundant white bloom, and with very distinct and striking stripes, or marblings of dull green. Stalk an inch long, slightly hairy, inserted in a broad and shallow hollow. Flesh greenish yellow, melting, and adheres to the stone. Juice exceedingly abundant, sweet and luscious.

In the American edition of "Lindley's Guide to the Orchard," this plum is incorrectly described under the name of *Flushing Gage*, as being a free stone. The Imperial Gage being the name given this plum by Mr. Prince, in his description, we have adopted it here.

IV. LAWRENCE'S FAVORITE.
(Lawrence's Gage.)

A new variety, of high merit, raised by Mr. L. U. Lawrence of Hudson, N. Y., from a seed of the Green Gage. The soil of Hudson, which is almost a stiff clay, is so wonderfully adapted to the growth of the plum, that a great many excellent sorts have originated there with the least possible care. This variety, and the Columbia, are already cultivated in all the gardens in that vicinity, and the remarkable size, beauty, and flavor of the Lawrence Favorite, will soon give it an universal reputation.

Lawrence's Favorite.

Lawrence's Favorite forms an upright tree of thrifty growth, with dark green leaves, rather below the medium size, and with upright growing, short jointed shoots. Young branches slightly downy.

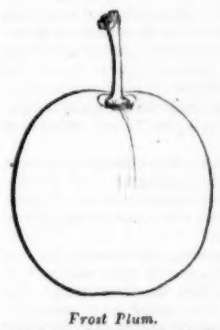
Fruit of the largest size, when the tree is not overloaded, nearly round, but inclining to an oval form. Stem short, only half an inch long, inserted in a narrow cavity. Skin dull green, clouded with streaks of darker shade beneath, and covered with a light bluish green bloom. The upper part of the fruit, when fully ripe, is frequently covered by a brownish net work. The flesh resembles in color that of the Green Gage, and adheres closely to the stone. The latter is five-eighths of an inch long, and flattened. Juice exceedingly abundant, and the melting flesh is very rich, sprightly and luscious. Ripe about the middle of August.

Autumn Gage.

V. AUTUMN GAGE.

A new plum raised by Wm. Roe, Esq. of Newburgh, of good quality, a very abundant bearer, and so late in its maturity as to be valuable. The tree forms a rather spreading head, with regular pointed ovate leaves, the branches drooping with the weight of the fruit, which is in perfection about the middle of September.

Branches slightly downy. Fruit medium size, oval, a little broader towards the stem or base. Stalk three quarters of an inch long, inserted even with the surface of the fruit. Skin pale lemon yellow, covered with thin whitish bloom. Flesh greenish yellow, separating from the stone; juicy, sweet, and of delicate, pleasant flavor. Stone long, compressed, pointed at both ends.


Frost Plum.

VI. FROST PLUM.
(Frost Gage.)

A pretty large variety of sweet Damson, which appears to have originated in Dutchess co. of this state, where it has for many years past been most extensively cultivated for market. Before fully ripe it abounds with sprightly acid juice, and is highly esteemed for preserving; and when at maturity, it is a sweet and luscious fruit for the table. The tree is a tall upright grower, with smooth and rather slender shoots, and bears abundantly. The fruit is in perfection about the 1st of October, and from its lateness and good quality, frequently commands from two to five dollars a bushel, even when hundreds of bushels are sent to market at once.

Fruit below the medium size, varying from oval to nearly round, with a distinct suture on one side. Color deep purple with a few brown specks. Stalk half to three-fourths of an inch in length, inserted with little or no depression. Flesh amber color, juicy, sweet, rich and melting, and adheres to the stone.

Horticultural Nurseries, Newburgh, Sept. 15, 1843.

MANAGEMENT OF THE PEACH ORCHARD.

MESSRS. GAYLORD & TUCKER—Your valued correspondent, Mr. L. Physick, has given us in your last no., an excellent article on the "Management of Fruit Trees," which in this latitude is of peculiar interest; and after a careful perusal I am constrained to his opinion, much as it militates against the practice of this part of the country, which is in favor of the constant tillage of the orchard. Our great peach growers are accustomed to plow and harrow their orchards three times during the summer, for the alleged purpose of keeping their trees in health; being assured that without this troublesome and expensive operation, they would soon die of the yellows. Now, to be sure, this *might* be the result of a neglect of cultivation, but your correspondent has led me seriously to question even its propriety, to say nothing of the advantages which are expected to result therefrom; and in casting about for experimental proofs, I believe that facts will be found to go against a custom, which is here so very generally acknowledged and approved. That orchards may be cultivated and cropped with impunity while the trees are young, there is, I think, no question; but long after, and when in the estimation of our Delaware friends, all *cropping* ought to cease, the periodical turning up the surface is religiously continued with the sole view of keeping the trees in health. Now, for the purpose of testing the real value of a practice which involves an expense of labor amounting to many hundred dollars annually, I would ask, has the very productive peach orchard, containing about three acres, belonging to Major Philip Reybold, and from which he has sold $2,700 worth of fruit in a year, besides distributing $300 worth among the members of his extensive family, been kept regularly under tillage? or rather, has not this orchard been used as a pasture for sheep, and the herbage been found of more value in some years than the fruit? Again, do orchards that have been scrupulously submitted to the periodical workings by the plow and harrow, *surely* retain their health and vigor and verdure, while others of the same age and in the same situation, when left uncultivated, die by scores of the disease called the yellows? Are more worms found in trees which are left uncultivated, than in those growing on cultivated land, and is the result always the same? Nay, to come to the point, I would ask Mr. Isaac Reeves, who has had as much experience in the matter as any man, if he has not, at the present time, orchards, where the trees are literally dying off by scores with the yellows, maugre all

his care, cultivation and circumspection; and whether he entertains the idea, that the period of their total destruction will be retarded a moment, by the application of the plow and harrow? The time has been, when peaches would grow and come to the greatest perfection without all this labor—a system that has obtained but a few years; but as with all these appliances they have not been made productive for several seasons past—nay, that in this time, and under the most careful treatment, they have literally passed away from many parts of the country, New Jersey in particular, what data can be afforded as proof, that the frequent cultivation of the orchard is to be depended upon, or recommended as a means of sustaining the trees in vigor, or even of preserving diseased trees from total destruction? To "dig around and dung" a diseased tree is another matter, and is a practice against which I am not contending; it is the periodical plowing and working old orchards with a view of sustaining them in health, that is the question before us. I am aware that the subject will remain to be discussed; for as it is not possible to prove a negative, there are no means of knowing that but for this labor, the trees of an orchard would have sooner perished; it is only certain that they have failed *with it*, and this is about all that is requisite to be known. I lately examined a peach orchard while it was under discipline for the worms, and can bear testimony that on a part of it which had never been cultivated, the trees were larger, much more vigorous in growth and in perfect health, with fewer worms, ten to one, than were found in trees growing on the other part, that had been regularly cultivated as a garden, well manured and thoroughly worked, and could not but consider at the time the question settled; but as Mr. C. P. Holcomb of Newcastle, has a peach orchard which he considers as having been materially benefitted by culture, and as he is one of your subscribers, is he not bound to give us his experience in the matter? It is the truth which we are seeking after, and I for one, am willing to follow, wherever it might lead.

Your correspondent's experiments appear to have been well adapted to the purpose of elucidation, and his deductions rational. And in conclusion would add, I planted an experimental crop of corn the present spring, so early that before it broke ground it had a foot of snow on it, several severe frosts occurring afterwards; yet it is now the best and strongest crop that I have any where seen. It has been kept clean, but never worked; that labor having been superseded by a thick top dressing of good dung, placed around the plants and slightly covered with earth from the intervals, when they were two feet in height. This was done with the view of ascertaining whether it is not customary to continue the working of corn long after the proper time for laying it by has arrived; and so far as present appearances warrant, the question with me is decided in the affirmative. I am ready to believe that by much tending the crop, the growth of the leaf and stalk might be encouraged; but judging by my own corn, I believe this may be done to the injury of the ear; just as the straw of a wheat crop may be encouraged at the expense of the quantity and quality of the grain; and which is so often practiced by enriching the land with large quantities of dung immediately before sowing the seed—the fruitful source of the fly and rust also. Your subscriber,

Delaware State, Aug. 15, 1843. JOHN DELANO.

MONTHLY NOTICES.

GOOD WOOL AND GOOD PRICES.—In a recent conversation with our friend GROVE of Hoosick, he informed us that he had purchased the present season over 100,000 lbs. of wool, at an average price of about 36 cents per lb., being an advance of about six cents on last year's prices. For his own wool, from 240 pure Saxony ewes and lambs, he received 60 cents per lb., being 10 cents above last year's price. These 240 fleeces averaged 2 lbs. 13 oz. The price received for it, is a sufficient proof of its quality. The farmers of Hoosick, have received for their wool this season, between $45,000 and $50,000.

We see it stated in the papers, that our friend MORRELL of Tompkins county, has sold his clip from a flock of over 2,000 Saxonies, at 50 cents per lb., being eight cents over last year's prices. His fleeces averaged over 2½ lbs. each.

That we may judge of the comparative profits of the different breeds of sheep, we shall be glad to be informed of the average weight of fleeces, and the prices of the wool, of flocks of Merinoes, South Down, &c. Will Mr. Avery give us the price received for the wool of his flock?

COLUMBIA FLORAL AND HORT. SOCIETY.—The 4th annual exhibition of this Society was held at Hudson, Sept. 21, 22, 23. The display of Flowers and Fruits was unusually brilliant and attractive, and must in several respects have exceeded all other similar exhibitions. We regret that our limits will not permit us to copy the descriptions of the splendid center pieces of Fruits and Flowers, so admirably arranged by our friend Ross and others. We rejoice in the success of this Society, and hope it may excite the other cities of the state to follow the example of our spirited and tasteful friends of Hudson.

THE CULTIVATOR ALMANAC, OR RURAL CALENDAR FOR THE YEAR 1844.—This is the name of a publication issued from the Cultivator office, and containing besides the usual astronomical tables, a great variety of suggestions, maxims, tables, &c. of interest to the farmer, gardener, and planter, items of domestic economy, &c. &c. In the arrangement of the matter introduced, utility has been constantly kept in view, and it is believed that in many respects the Cultivator Almanac will be found a useful manual in the hands of the farmer. It is fully illustrated with plans of buildings, gardens, cuts of various animals, and implements, &c. Editions adapted to the principal divisions of our country in the calculations, &c. have been printed to supply demands from any quarter of the Union. It contains 32 pages closely printed matter, and will be furnished to order at the lowest possible rates. Orders addressed to LUTHER TUCKER, Albany, Publisher of the Cultivator.

FAIRS THIS MONTH.—Cattle Show of the American Institute, on the 18th and 19th.—Herkimer Ag. Soc. at Herkimer, 10th.—Washington Co. Ag. Soc. at Argyle, 10th and 11th.—Steuben Ag. Soc. at Bath, 18th.

MARYLAND AG. SOCIETIES.—The Baltimore Co. Society hold their next Fair at Govanstown, on the 18th, 19th and 20th of October—the Prince George's Society at Upper Marlboro, Nov. 1, 2.

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FRUIT TREES.

THE subscribers are now ready to receive orders for superior Trees, viz: Apples, Plums, Pears, Cherries, Peaches, &c. &c., from their new nurscry. Trees are all warranted in a healthy condition, and true to their sorts. Orders are entered on the order book, to be forwarded as soon as practicable in the fall. Orders respectfully solicited, and will receive prompt attention. WILSON, THORBURN & TELLER.

☞ A liberal discount made to those who purchase to sell again, or by wholesale.

Orders left with WILLIAM THORBURN, Seed and Agricultural Repository, No. 38 Broadway, Albany, will be promptly attended to. *Albany, Oct.* 1, 1843.—2t.

FRUIT TREES,

OF thoroughly proved varieties only, consisting of a superb collection of *Peaches*, and a fine assortment of Apples, Cherries, Nectarines, Apricots, &c., for sale at the Nursery of THOMAS & SMITH, Macedon, Wayne co., N. Y.

The Peaches consist of about 12 varieties, selected with great care from 60 or 70 proved sorts, chiefly from some of the best nurseries in the United States, ripening nearly in the following order:—Early Tillotson, Large Red Rareripe, Early York, White Imperial, Royal Kensington, Yellow Alberge, Seabolt's, Malacotoon, Old Newington, Hill's Chili, Late York, Heath Cling, &c.

Among the Apples, are Yellow Harvest, Sine Qua Non, Buffington's Early, Strawberry, Rambo, Gravenstein, Ribston Pippins, Bellflower, Esopus Spitzenburg, R. I. Greening, Swaar, Tallman Sweet, &c. &c. Price of peaches and apples, 25 cts. each,—$20 per 100.

Of Apricots, [a fruit nearly equal to the best peaches, and ripening weeks before them, are Breda, Museh, Peach, Early Peach, Black Apricot, &c. 37½ cents each.

New catalogues, with full lists and practical directions, furnished gratis on all [*postage free*] applications; and being strictly periodical, postmasters may order them.

Trees packed in the very best manner for railroad and canal transportation. *Oct.* 1, 1843.

FOR SALE.

WILL be offered for show and for sale, at the New Jersey State Fair, held at Patterson, on the 16th and 17th of October next, the Premium Stallion TOP GALLANT, Jr. five years old last May, sixteen hands three inches high, a beautiful bright bay, entirely free from white. He was got by old Top Gallant, and he by old Whalebone, and he by Granby, and Granby by old imported Messenger; his dam a blooded mare, and very fast trotter.

This unrivaled horse was exhibited on the 26th day of November, 1819, at the Musconetcong Agricultural Society, and received the silver prize medal, as a premium for the best colt under three years of age; and on the 5th of November, 1840, the premium was again awarded to him as being the best colt over one and under three years of age; and again in October, 1841, at the great Fair of the American Institute, held at Niblo's Garden, New-York, although at the age of three and a half years, and being much fatigued in traveling, was awarded the second premium, and considered by judges the best horse of his age in the United States. A few desirable points I think worthy of notice, which he possesses. He has a small neat head, and handsome set ear, a bright hazel eye, a most beautiful arched neck, short strong back, wide deep chest, long under the belly, and a powerful stifle, legs moderate as to length, very smooth and flat, joints strong and compact, and although well proportioned, yet he possesses all the action of the thorough bred race horse.

To gentlemen wishing to obtain the best stock horse—so allowed by competent judges—there is now in the United States of his age, they then can have an opportunity of doing it; as perfect satisfaction can then be given to his soundness, stock and service, and perhaps some of his colts may be there, which will show for themselves. SPENCER C. SMITH.

Bloomsbury, N. J., Oct. 1, 1843.

SOUTH DOWN SHEEP FOR SALE.

HAVING, with my son, concluded to make an agricultural visit to England, and perhaps the Continent, with a view of becoming acquainted by personal observation with the greatly improved cultivation of the soil, and more especially to examine our favorite departments of *Stock* and stock breeding, it has been thought best to dispose of the principal part of our South Down flock, consisting of Ewes, Lambs and Bucks, all of which are exclusively bred from the Glynde and Babraham flocks of John Ellman, Esq. and Jonas Webb, Esq. in England. More than this need not be said for their purity of blood and excellence of descent. The flock is in the most perfect health, and we think it will be conceded, when seen, that the produce is in no way inferior to the imported sheep; but it was advisable to sell them, that the farm should not become overstocked during our absence.

Mr. THOMAS HOLLIS of Gilbertsville, Butternuts, will take charge, and make sale of them on the ground selected for the Agricultural exhibition of the American Institute, to be held in New-York, on the 16th and 19th of October, when the flock will be exhibited and sold without reserve.

FRANCIS ROTCH.

Butternuts, Otsego co., N. Y., Oct. 1, 1843.

FINE FARMS FOR SALE.

THOSE very superior Farms situated near Galway Corners, in the county of Saratoga, collectively known as the Earl Stimson Farm, will be sold cheap and on terms most accommodating to the purchasers as to credit. The property consists of about 340 acres, is so situated as to be conveniently divided into three or four farms, all having the necessary buildings, and will be sold together or in parcels, to suit purchasers. Each farm is properly divided into pasture, tilled and wood land, and is in the highest state of cultivation, fenced in the best manner and with the most durable materials. The property comprises among other buildings, a large and convenient hotel, which is a favorite resort of families in the summer on account of the superior healthiness and beauty of the country. The farming buildings of all kinds are most extensive and convenient for all the purposes of agriculture and the raising of stock. The premises also include a country store, a most eligible location for a country merchant, having been occupied as such for about forty years. It is within two hours drive of Ballston, Saratoga, and Schenectady. The farm is well known among leading agriculturists, and in the agricultural periodicals, as the Pattern Farm. For terms, &c., apply to J. OAKLEY,

Oct. 1.—tf. No. 75 Nassau street, New-York.

WARREN'S NEWLY INVENTED HORSE POWER AND THRESHING MACHINE.

THE prices of these highly valuable machines, are as follows, viz:

For a Two Horse Power and Threshing Machine, together, $75
" One " " " " " 60
" Two Horse Power Machine, alone, ... 50
" One " " " " 40

Payment to be made in this city, on delivery of Machines. Bands not furnished except by particular order—price $4 each. Orders, post paid, executed promptly.

L. Bostwick, J. Plant, W. T. Cole. } L. BOSTWICK & CO. 58 Water st.

New-York June 17, 1843—jytf.

POUDRETTE.

CHEAPER STILL.—Seven barrels for $10, and eleven barrels for $15, for this fall's use on Wheat and Rye—in order to show its great value for those crops. Orders will be executed immediately on receipt of letter, or personal application with the money, to D. K. MINOR,

Aug. 1, 1843.—3t. 23 Chambers st., New-York.

PLATT'S PATENT PREMIUM PORTABLE MILL

For Grinding all kinds of Grain, Spices, Drugs, Paints, &c.

THE subscribers have been recently appointed general agents for the sale of the above most valuable mills in the state of New-York; also for the sale of patent rights in the patent. Price of 12 inch machine, $40; of 15 inch, $60; of 18 inch, $100; of 24 inch, $110, payment to be made on delivery.

All orders—post paid, if by letter—will be punctually attended to. Samples of the mill may be seen at their office.

3t. L. BOSTWICK & CO., 58 Water-st., New-York.

AGRICULTURAL INSTITUTE, BRIDGEPORT, CT.

THE REV. B. G. NOBLE intends to commence an Agricultural Institute on his farm in the town of Bridgeport, on the first Wednesday of October. The system of education will be adapted to the wants of youth designed for the pursuits of agriculture. It will include the natural sciences, in their connection with agriculture, and all the higher branches of an English education.

The winter term will commence on the first Wednesday of October, and the summer term on the first Wednesday of May, and will each continue 22 weeks.

Expenses for board, tuition, washing and fuel, for a term, $80. Payments quarterly, or for the term, in advance. If not provided by the pupil, there will be a small charge for bed and bedding.

Only ten pupils can at present be accommodated. Application to be made to Rev. B. G. Noble, Bridgeport, Conn.

Bridgeport, August 15, 1843.—2t.

MT. HOPE BOTANIC GARDEN AND NURSERY. ROCHESTER, N. Y.

THE proprietors of this establishment offer for sale an unusually fine assortment of Fruit Trees, comprising the choicest varieties of Apple, Pear, Peach, Plum, Cherry, &c. now cultivated.

The trees are of good size, exceedingly thrifty, and free from diseases of any kind. The stock of Cherry and Peach particularly is very large and of beautiful growth.

They have also on hand an excellent stock of *Ornamental Trees and Shrubs, Green House Plants, Bulbous Roots, Double Dahlias and Roses.*

The latter embraces the most desirable new varieties of the *monthly* Bengal, Tea scented, Bourbon and Noisette, and of the *hardy* Province, Damask, Moss, Hybrid, China, &c., and of the magnificent climbing varieties of Ayrshire, Boussault and Rubifolia, including the splendid new *Double Michigan.*

The proprietors pledge themselves to execute all orders they may be favored with in the most satisfactory manner. The utmost care is taken to have every parcel that leaves the nursery properly packed and shipped.

Catalogues will be forwarded, gratis, to all applicants, and may also be had at the office of the Cultivator in Albany, and the New Genesee Farmer in Rochester, and at the several agencies of the Rochester Seed Store in the country.

It is particularly requested that all orders be forwarded as early as possible, (say before 10th October,) so that they may be executed as soon as the season will admit.

A remittance or satisfactory reference is invariably required. Address, post paid, ELLWANGER & BARRY,

Sept. 1, 1843.—3t. Rochester, N. Y.